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ental Digest

December 1954

IN THIS ISSUE

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Cover illustration—Acht article page 544

...the "flexibility factor" in relation to the quality of full and partial denture esthetics.

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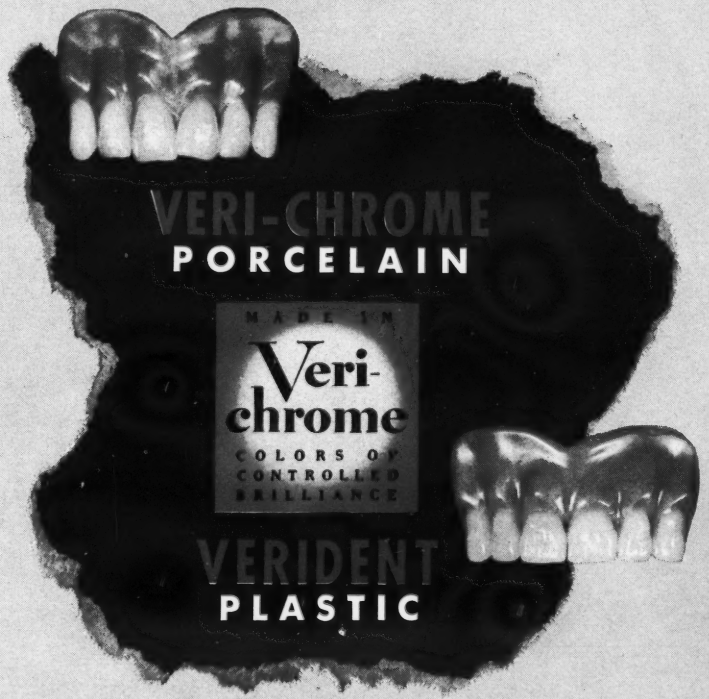

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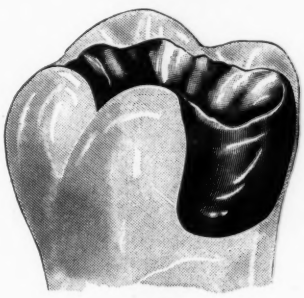

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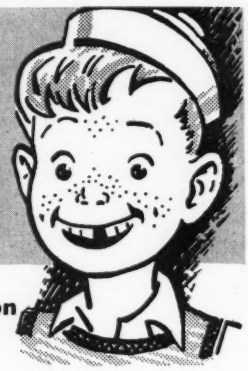

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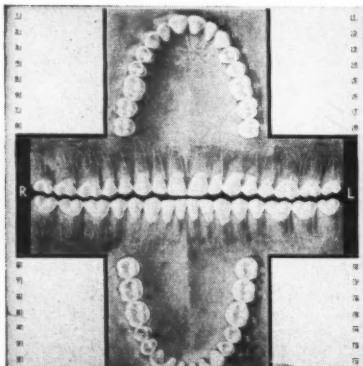

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EDWARD J. RYAN, B.S., D.D.S., Editor
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JACK COOK, B.A. (Brooklyn College, 1941) has published several articles on dental subjects. Mr. Cook has also taught dental mechanics in the New York Secondary Schools. The subject of his current article is PREDICTABLE RELATIONSHIPS AS APPLIED FOR MOUTH REHABILITATION.

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An Immediate FULL DENTURE *Procedure*

ARTHUR VAN VICTOR, D.D.S., East Detroit, Michigan

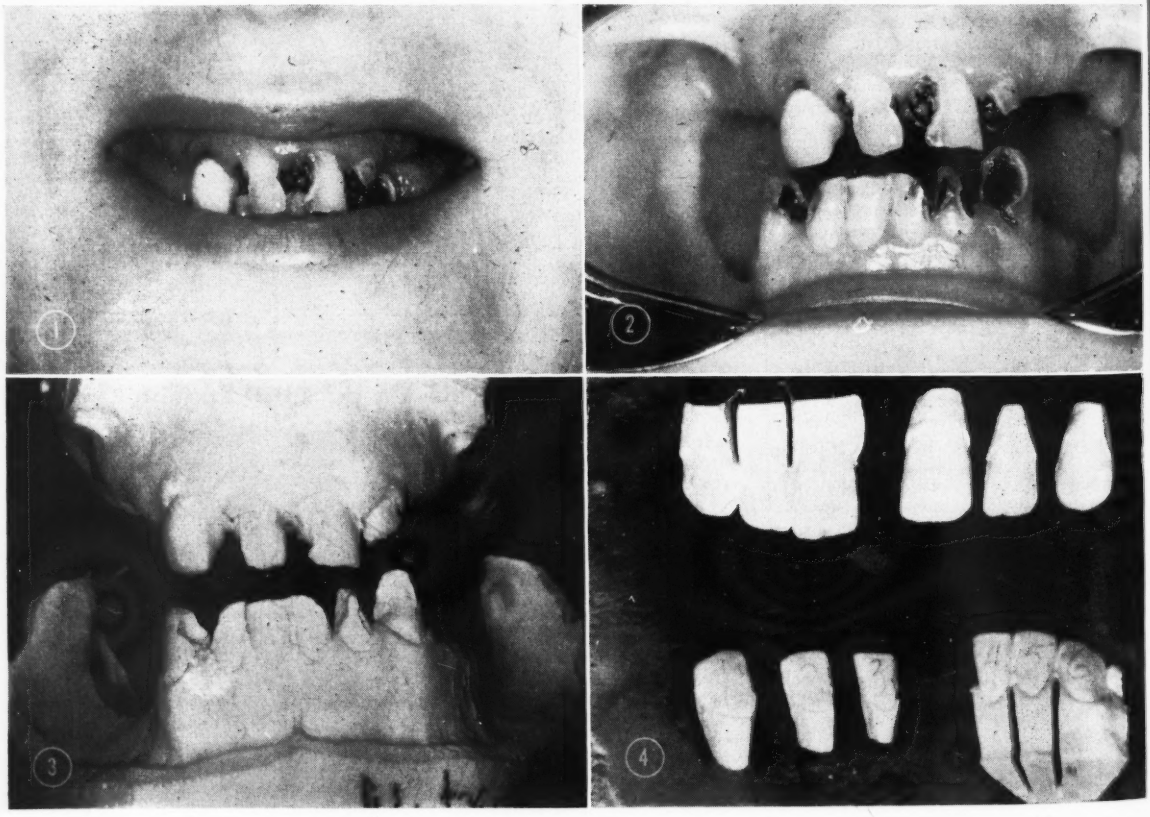
DIGEST

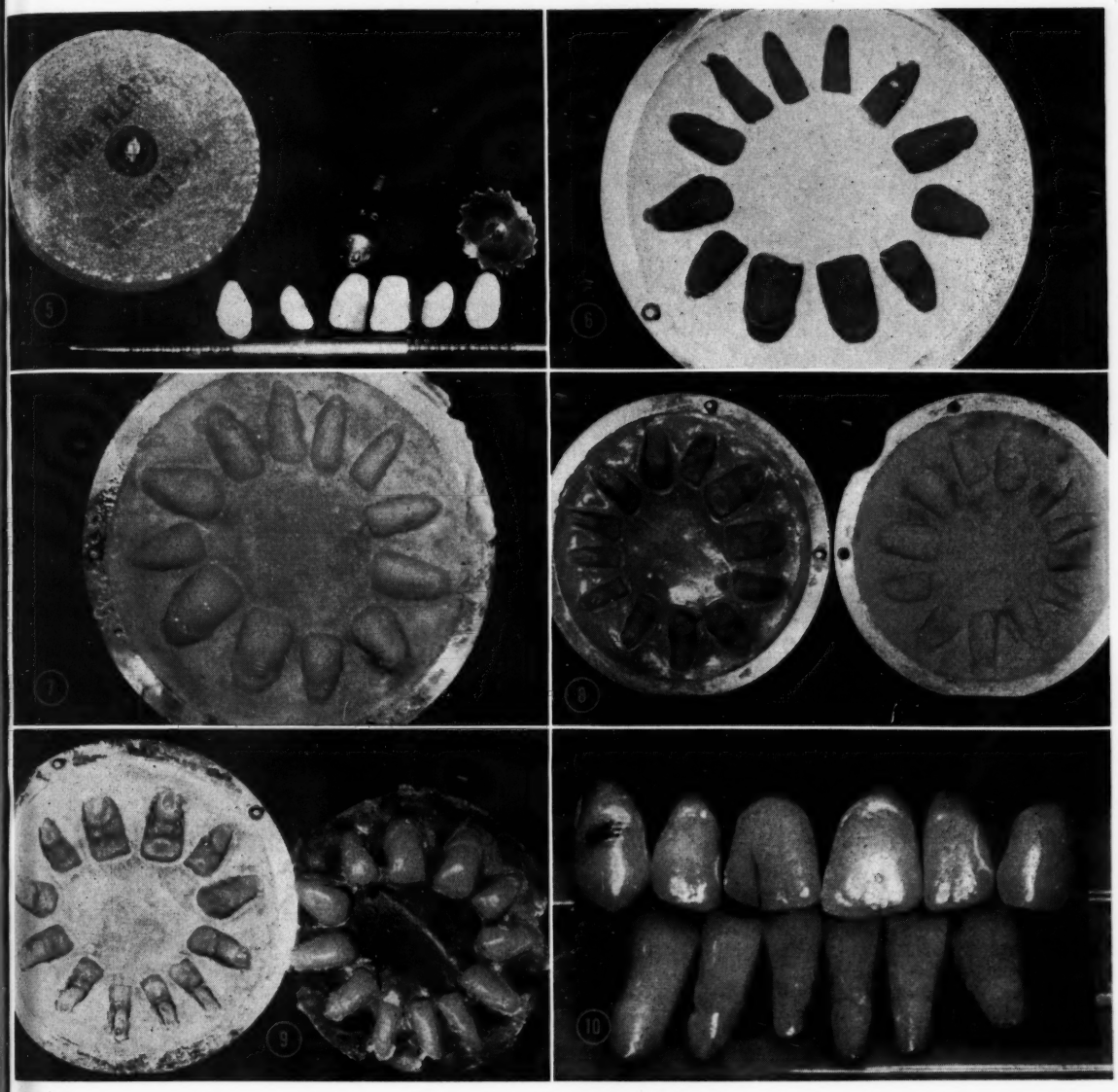
The immediate full denture has for some time been an accepted phase of the patient's edentulous experience. Demand has compelled the dentist to render this type of service despite the disadvantages involved. In no other phase of dentistry is the cosmetic aspect so significant. The apprehension which many patients feel as they enter this new stage in their lives challenges the operator to avail himself of every medium possible to attain an esthetic result consistent with the patient's expectations.

The author of this article considers this problem one of extreme importance and describes a method which enables the operator to comply with the wishes of the patient and at the same time fulfill the clinical requirements of the individual case.

The technique presented includes (1) *the use of the socketing principle, and* (2) *the use of a duplication process of the natural anterior teeth.*[1, 2]

[1]Van Victor, Arthur: Positive Duplication of Anterior Teeth for Immediate Dentures. J. Pros. Dent. **3**:165-177 (May) 1953.
[2]Van Der Ven, V. C.: Immediate Full Dentures. Internat. Dent. J. **3**:354-365 (March) 1954.





Procedure

To consider an immediate denture as anything but a temporary measure during a difficult period is not a realistic approach. The temporary nature of the denture and the necessity of a remake later should be explained to the patient before treatment is undertaken.

At the first appointment radiographs are taken and study casts are made with recommendations as to the possibilities and limitations of this particular case. The posterior teeth are extracted and a short healing period of two weeks to a month is recommended.

Figures 1 *and* 2—Photographs showing the patient at the termination of the healing period of the posterior sockets. The anterior teeth are badly broken down, with an extrusion of the lower right cuspid projecting beyond the occlusal plane.

Figure 3—Stone casts showing anterior teeth as they exist at present.

Duplication of the Anterior Teeth

Figure 4—The anterior teeth are restored in wax. They are then duplicated in an investing plaster such as "boil soft." The individual plaster teeth are formed by cutting through the base into the embrasure with a lighting disc. This disc should be modified by cutting saw teeth into it. The plaster teeth are separated from each other with a sharp instrument inserted into the contact area from the lingual. The bases of the plaster teeth are formed by grinding them with a slight taper from the cervical margin to the tip.

Figure 5—The instruments employed to prepare the plaster teeth are (1) a mounted 7/8-inch lighting disc with the saw-toothed edge, (2) a diamond point for perfecting the grinding wheel which is used to shape the base. Also shown is a set of plaster teeth which have been prepared.

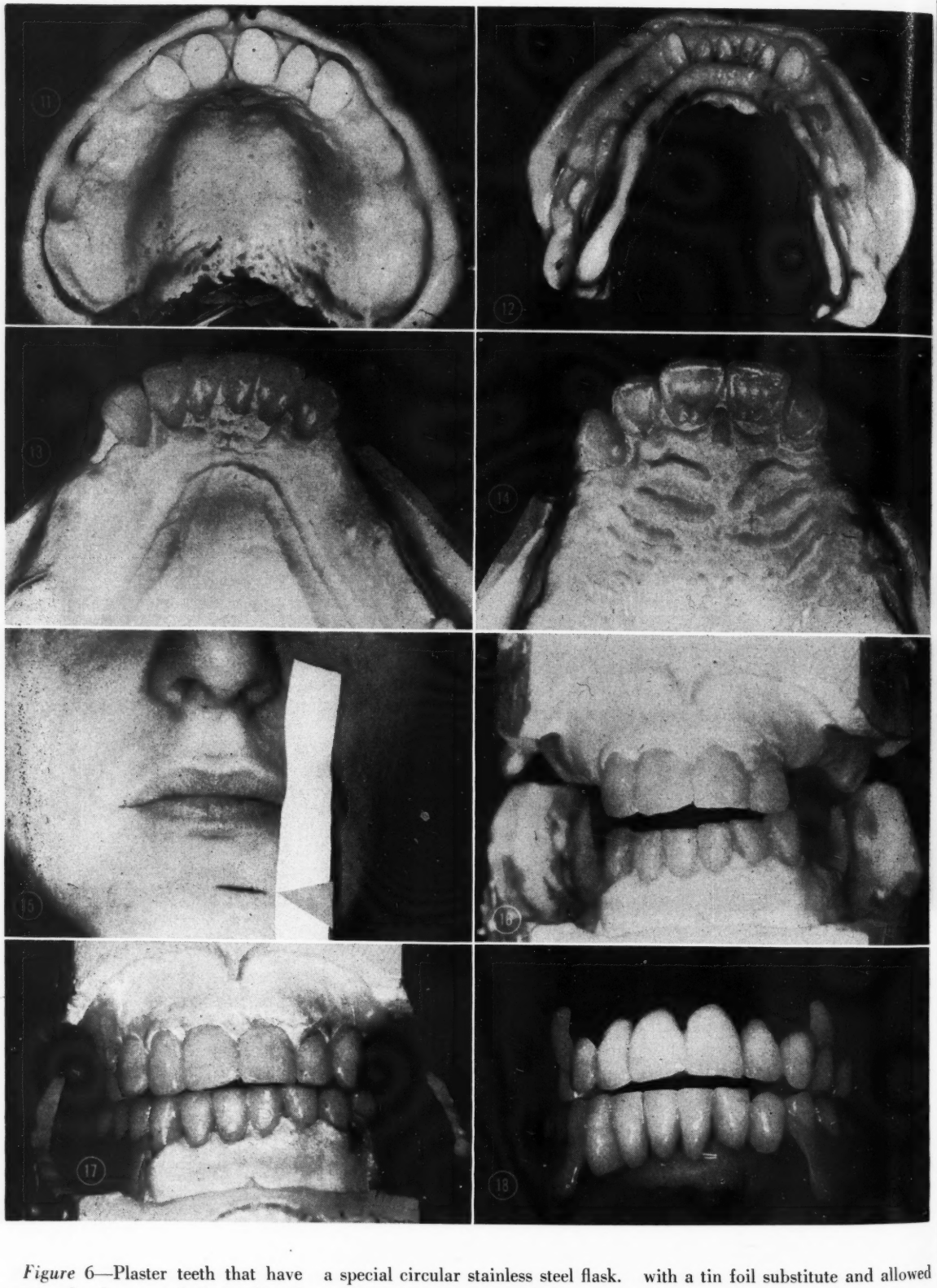
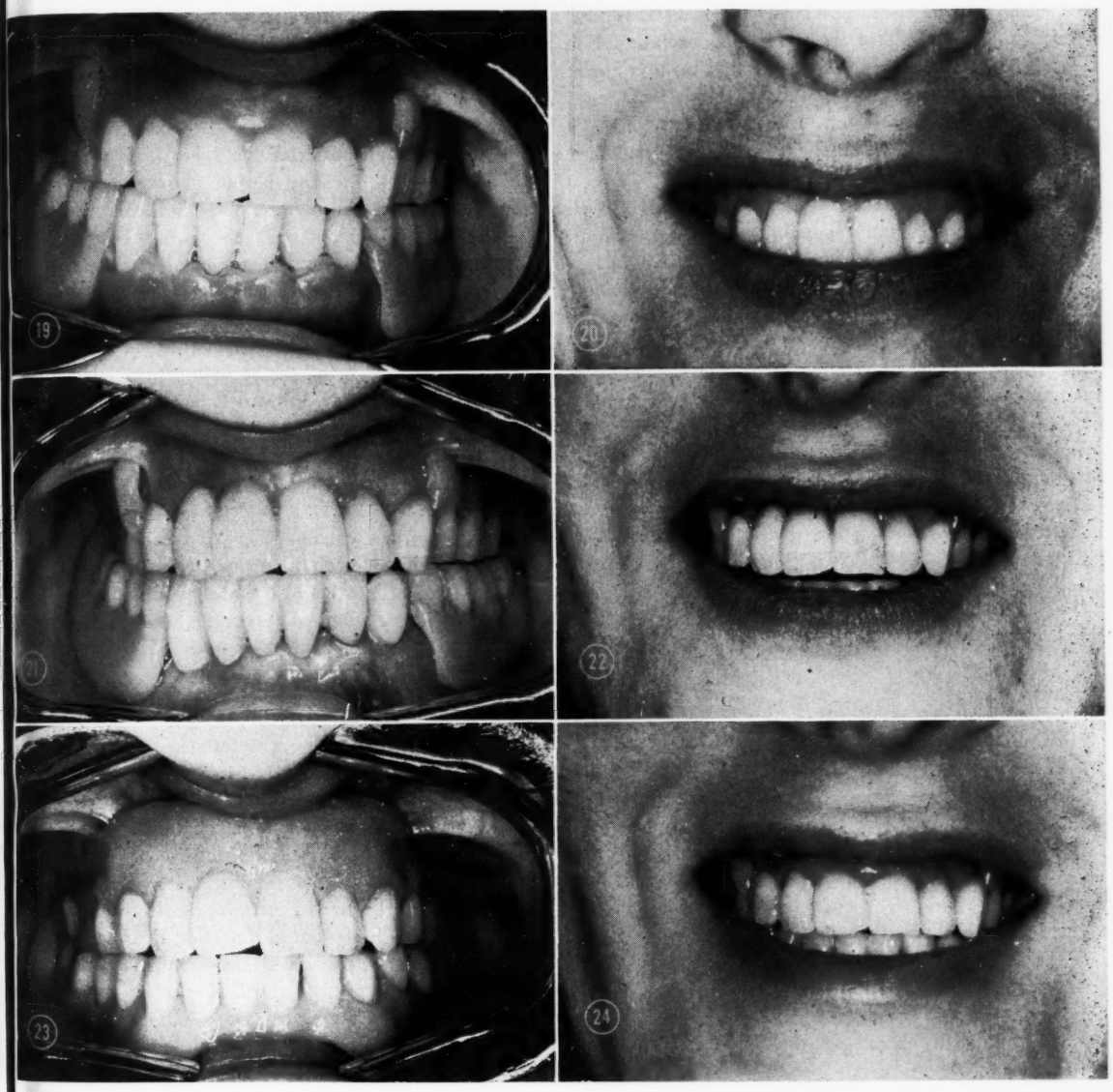


Figure 6—Plaster teeth that have previously been soaked in liquid floor wax and allowed to dry, and then invested in a good hard stone in a special circular stainless steel flask.

Figure 7—The second half of the flask has been poured and the plaster teeth removed. The mold is painted with a tin foil substitute and allowed to dry.

Figure 8—Dry powder has been sifted into the mold both in dentine



and incisal colors in excess of the amount needed. The incisal color has been carried up to the height required by the case and is then moistened with the monomer. The plastic is allowed to remain in situ until it has taken on enough body to resist closure of the flask. The flask is then opened and the flash is removed. Characterization of the teeth may now be formed. *The flask is closed and allowed to remain closed for 24 hours. No processing is done at this time.*

Figure 9—Plastic teeth are trimmed and mounted. These teeth have not been processed but are just hard enough to resist distortion.

Figure 10—Shows the anatomy of the plastic teeth.

Final Impressions

Figures 11 *and* 12—Plastic trays are built over the original casts to which a wax shim has first been applied. These trays are placed in the mouth and a functionally molded periphery in compound is adapted to them. An alginate wash is taken to complete the impression. *The duplicated plastic teeth are now inserted into their respective positions into the impressions.*

Figures 13 *and* 14—Stone casts poured from the final impressions, showing the lingual anatomy of the duplicated teeth and their relationship to the casts.

Figure 15—The patient with a strip of adhesive tape and marker showing the rest relation. This is an important position and must be registered accurately as the amount of interocclusal space must be noted at this level in order to be able to ascertain the amount of vertical restoration that can be accomplished to develop incisal clearance. Frequently incisal clearance cannot be achieved because of the lack of interocclusal space.

Figure 16—Final casts with dupli-

cated teeth have been previously mounted on the articulator by means of a face-bow transfer and centric relation has been recorded.

Figure 17—The posterior teeth have been set up. An uncomplicated pattern of occlusion must be developed in immediate denture construction because the constantly changing supporting structure beneath the dentures results in a constantly changing occlusal relationship. A monoplane tooth is suggested which is set to a mean occlusal plane in relationship to the ridges.

Figure 18—Processed dentures which are ready for insertion, showing the interrupted labial flange.

Figure 19—Upper and lower immediate dentures in position two weeks after their insertion. Note the intimate contact of the gingival tissue as it has festooned itself around the vestiges of the anterior teeth. It is evident that this relationship cannot endure, but the first month with these dentures is a gratifying experience to the patient.

Figure 20—The patient with immediate dentures after two weeks of use.

Figure 21—Immediate dentures after three months of use. The gingival tissue has receded showing the entire length of the anterior teeth. The relationship of these anterior teeth to the ridge with consistent supervision by the operator has resulted in a butted gingival type of case.

Figure 22—The patient at the end of three months. The plicae nasolabialis is moderately pronounced.

Figure 23—Immediate dentures have been rebuilt and the labial flange has been restored.

Figure 24—The completed dentures are shown.

Summary

There are three areas of controversy in immediate denture construction:

1. Should the extraction of the posterior teeth be performed and a healing period allowed prior to the fabrication of the immediate dentures, or should the entire surgical procedure be attempted incident with the insertion of the case.

2. Is there a place in immediate full denture construction for dentures using the socketing principle.

3. How extensive should the surgical procedures be and to what extent should the alveolectomy be performed.

This paper has presented a practical approach to these problems, especially in cases where a flange would otherwise be unsightly, and where limited surgery is recommended.

22422 *Gratiot.*

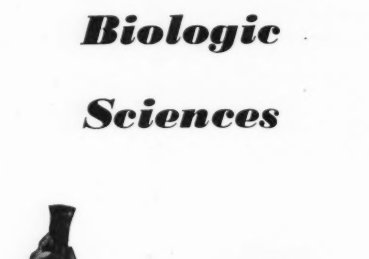
MEDICINE *and the Biologic Sciences*

Gouty Arthritis

In general there is not a sufficiently high index of suspicion for gouty arthritis. The condition occurs in every strata of life. The fact that twenty men are afflicted to one woman, should not remove this disease from the differential diagnosis in women with joint disease. especially in those in the postmenopausal period.

The typical pattern of an attack of acute gouty arthritis is that of sudden acute great toe joint pain. It often starts at night with (1) rapidly increasing discomfort, (2) swelling, (3) redness, (4) local heat, and (5) exquisite tenderness. The attack, if untreated, will usually subside in four to ten days, leaving no residuals except perhaps some desquamation of the overlying skin.

This typical picture ushers in the disease in only about one-half of the cases. The remaining ones show a similar type of involvement in the region of the (1) instep or ankle or heel, (2) knee, (3) hand or wrist, or (4) elbow. Occasionally multiple joints are involved, either simultaneously or successively.



In untreated cases, there are variable periods of freedom. Subsequent attacks develop in the same or other joints at variable intervals. The history of a series of such acute attacks with complete clearing between bouts is almost pathognomonic of gout.

The acute attacks may be precipitated by (1) minor trauma, (2) overindulgence in high purine foods or fats, or in alcoholic beverages, (3) surgical procedures or other situations involving stress, (4) infections, or (5) certain medications, notably mercurial diuretics, liver extract, and vitamin B compounds.

It is not until several years of such repeated acute attacks that the changes of chronic gouty arthritis appear. These result from the formation of tophi in and about joints and secondary degenerative joint disease or osteoarthritis.

Deposits of urates (tophi) in articular, periarticular bursae and subcutaneous tissues eventually develop in from 25 to 50 per cent of patients with gout. They are seen most frequently upon the helix or antihelix of the ear. Occasionally they occur in the oleocranon and prepatellar bursae and in the tendons of the fingers and wrists. Tophi have been found in all parts of the body, even in the walls of blood vessels.

When tophi are present in easily accessible places, a positive diagnosis of gout may be made by needl-

(*Continued on page* 563)

Predictable Relationships

As Applied for MOUTH REHABILITATION *Procedures*

JACK COOK, B.A., La Crescenta, California

DIGEST

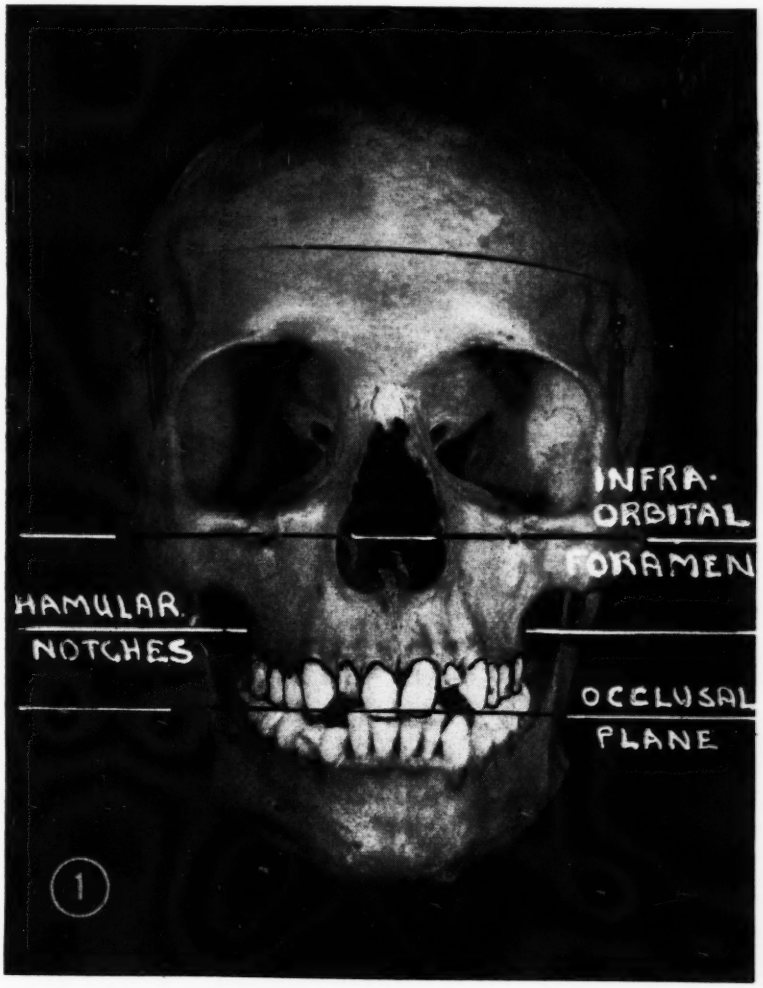
This article describes a mechanical appliance to be used to reproduce the position of the occlusal height in the intermaxillary field. The procedure employed is presented in detail and the advantages obtained from this method are noted.

Reestablishment of Occlusal Table

Complete mouth reconstruction involves the reestablishment of the occlusal table within the intermaxillary space. As in full denture construction where the space is fluid, the operator has to designate the precise position for the occlusal table. In rehabilitation techniques the occlusal table is recreated in the course of rebuilding the occlusals of the teeth if all are involved.

Leveling the Bite—An objective seems to be to "level" off the bite. Where extensive reconstruction is entailed, an expression such as "level" is in implication a relationship to a standard. Level does not exist in a void, but rather to a base or reference line from which other planes are leveled.

Guide Used in Certain Phases—The identification and employment of reference lines or planes are needed to reconstruct the occlusal plane. Although each specific case involves individual prognosis, there



1. ***Note the basic relationship between the plane of occlusion to the hamular notches to the infraorbital foramen.***

is nonetheless a common denominator that can serve as a guide in some phases of this procedure.

Relationships Defined—The occlusal position can be tentatively related to basic skeletal landmarks for there is a predictable relationship between the occlusal position and cranial architecture.[1] It has been reported that frontally the occlusal table should be basically parallel to a line drawn between the hamular notches (Fig. 1), and in the other direction should be parallel to the alatragus line. Where intraoral landmarks are used the occlusal position can be related to the hamular notches and the nasal spine (Fig. 2) as equivalent positions of the ala and the tragus.

Mechanical Device for Predetermining Position

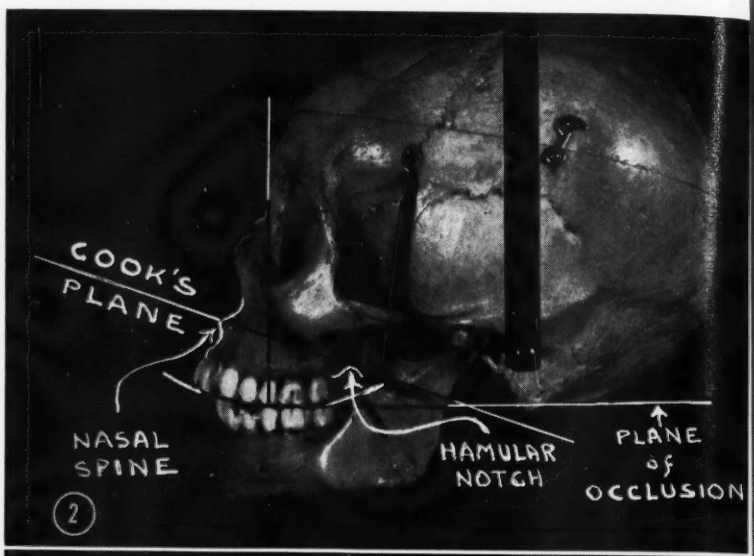
A mechanical device which reproduces the position of the occlusal table to the two hamular notches and the nasal spine makes it possible to predetermine the occlusal table (Fig. 3). This is needed for the construction of anatomic bite-rims or acrylic splints. Such bite-rims or acrylic splints offer the operator a tentative, anatomically designed biting surface. This provides a good, sound start. On this the adjustments and alterations made necessary by the peculiarities of the case being treated can be completed rapidly and with great accuracy.

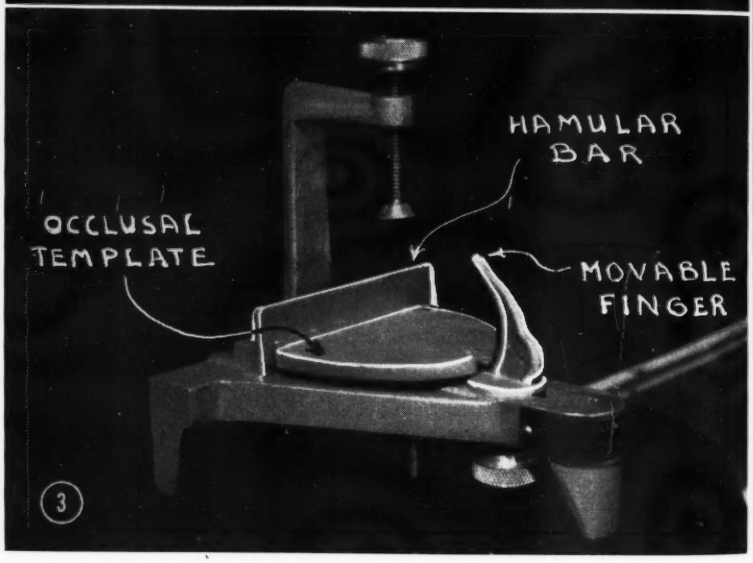
Procedure—The simple procedure involves the following steps:

1. An upper cast is made from a complete upper maxillary impression.

2. The cast is placed in the instrument so that the two hamular notches of the cast are astride the horizontal bar while the anterior periphery roll above either central engages the movable finger.

3. Suspended in this manner the model basically reproduces the cast of the maxilla from the patient's head to the work table for these are nominal positions of the maxilla as found in most cases.





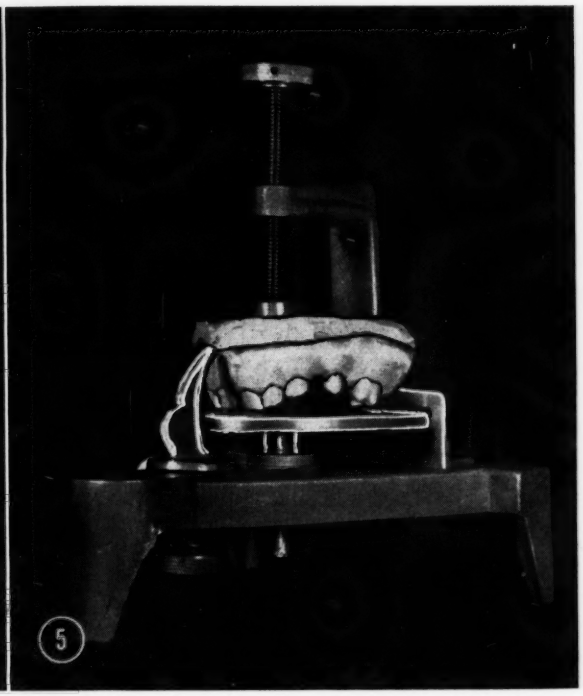
2. ***Note the relationship between the occlusal plane to the Cook plane; that is, a line drawn between the nasal spine and the hamular notch.***
3. ***The occlusal analyzer is a schematic skull having built into it the occlusal plane parallel to the hamular notches and reproducing the angles as shown in Figure 2.***

4. The occlusal movable template can be pushed up against the existing teeth; this sets up a comparison of the existing occlusal patterns to a tentative, ideal occlusal position, the ideal position being in relationship to the hamular notches and the nasal spine, as mentioned previously.

Reconstruction of Occlusal Height—Where teeth have migrated, the extent of migration is visible by inspection in contrasting the migrated teeth to the template (Fig. 4). On the other hand, where attrition may have occurred and teeth are below their normal crown length and must be extended in length by crowns or veneers, the occlusal template will be helpful (Fig. 5).

Method — Reconstruct the new height by employing wax over the teeth on the cast and letting this wax take the shape of the template. This will form an anatomic bite-rim. Such a bite-rim can be used in wax or can be converted into an acrylic splint;

[1]Cook, Jack: The Utilization of Anatomic Landmarks in Orienting an Occlusal Plane for Edentulous Patients, DENTAL DIGEST **58**:202-205 (May) 1952.
[2]Sloane, Robert, and Cook, Jack: A Guide to the Orientation of the Plane of Occlusion, J. Prosthet. Dent. **3**:53-65 (Jan.) 1953.



4. ***Note migration of molar and cuspid.***

5. ***Note inverse Curve of Spee. Attrition of the anterior teeth is clearly evident. The patient can more easily understand dental concepts of malocclusion with the aid of this method of presentation.***

either can then be used in the mouth as a guide in preparing the opposing teeth and setting up the new occlusal position.

Uses for Tentative Bite-rim—After the suitable adjustments are made on the tentative anatomic bite-rim, it is returned to the articulator in the laboratory and used as a template in waxing the necessary abutments or pontics, or used as template when setting up the teeth or on-lays. The dentist now has a tangible instrument to work with; only by having a second anatomic start can the difficult problem of reconstruction be reduced to essentials and some measure of chance be eliminated.

Patient Understanding Improved—This mechanical device which equates the occlusal position in terms of skeletal landmarks can serve to foster patient understanding. The casts can be placed into the analyzer and the problem can be seen by the patient simply by comparing the template representing the normal occlusal position with his own occlusal position as represented in the study cast. Patients can readily comprehend the discrepancy between one and the other. The old adage that a picture is worth more than a thousand words is true in this case where more than a picture, a demonstration, is available. An analysis, a story showing the specific problem as applying to the patient, is presented by the occlusal analyzer. Such a visual aid is of great help in establishing the necessary rapport between the patient and the dentist.

3757 *El Caminito Street.*

Coronary Disease

THE GREATEST incidence of coronary disease is in the early fifties when men equipped by experience and training should yield their greatest contribution to industrial progress, and any avoidable loss must be eliminated. Every case must be individually assessed and the far too common and equally ignorant assertion that the manifestation of coronary disease marks the end of a man's useful working life must be steadily avoided . . . A man may do in safety anything he can do in comfort, and he is well advised to remain active within his limits of comfortable exertion, rather than sink into himself and lead a life of invalidism. If he remains active, I believe that the development of the collateral circulation is assisted by the increased blood flow which accompanies effort, whereas it is probably hindered by the stagnating blood flow of ill-advised rest.

Adapted from *Journal of the American Medical Association* **155**:1229 (July 31) 1954.

Modified GINGIVAL FLAP SURGERY

for the Periodontal Pocket

MARVIN A. TUCKMAN, B.S., D.D.S., Paterson, New Jersey

DIGEST

This article describes a method for reduction of the periodontal pocket. Etiology is not discussed, but it is assumed that total conservative treatment for the periodontal condition has been completed.

General Considerations

In many discussions on the elimination of the periodontal pocket an important fact has often been overlooked: the periodontal pocket as a clinical entity represents a symptom of a disease process.

Etiologic Aspect Important—Since the pocket is only a symptom, successful periodontal treatment cannot be achieved by elimination of the pocket alone. For successful treatment, the etiologic factors for pocket formation in the patient must be determined and eliminated.

Reasons for Elimination—Glickman[1] lists the following reasons for eradicating the periodontal pocket:

"1. The periodontal pocket is an area of food accumulation and frequently a zone of active pus formation.

2. The presence of periodontal pockets creates conditions which are conducive to a caries-like destruction of the cementum . . .

3. Associated with the presence of periodontal pockets are secondary degenerative changes in the gingivae which lower the tissue resistance . . .

4. The presence of periodontal pockets facilitates accumulation and putrefaction of food.

5. Periodontal pockets are a source of discomfort in the course of mastication . . .

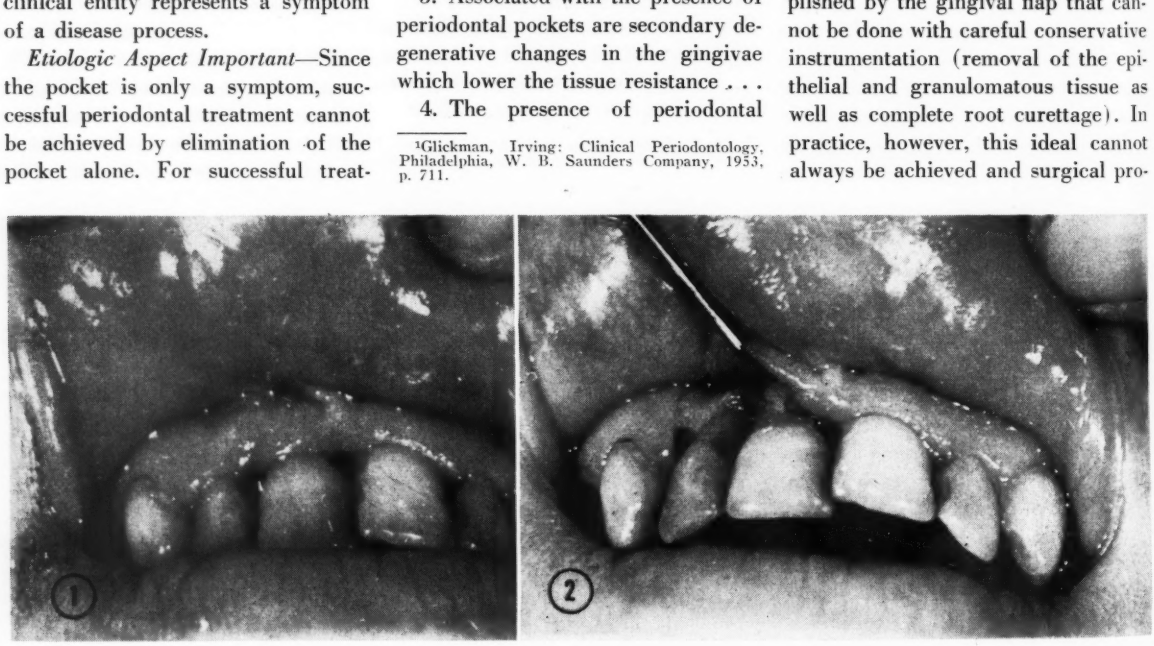
6. The inflammatory changes associated with the periodontal pocket . . . exert a destructive effect upon the underlying bone."

[1]Glickman, Irving: Clinical Periodontology, Philadelphia, W. B. Saunders Company, 1953, p. 711.

Gingival Flap Surgery

In this procedure a gingival flap is made so that the base of the pocket is exposed for easy access and thorough instrumentation.

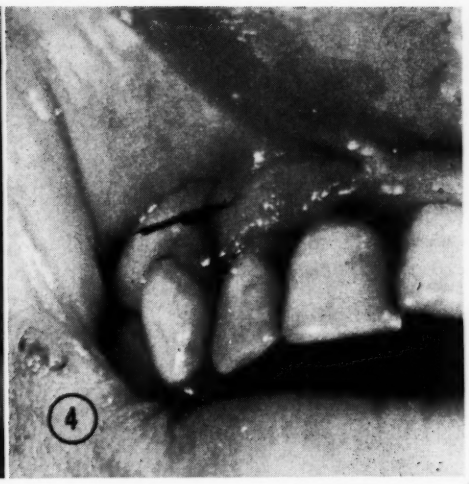
Conservative Treatment Ideal—Theoretically, nothing can be accomplished by the gingival flap that cannot be done with careful conservative instrumentation (removal of the epithelial and granulomatous tissue as well as complete root curettage). In practice, however, this ideal cannot always be achieved and surgical pro-



1. ***Preoperative view. A deep pocket remains between the maxillary right central and lateral incisor although conservative therapy has been completed.***

2. ***The flap is retracted showing the pocket area. Granulation tissue is present at the base of the pocket. The incision bisects the papilla.***

3. ***Periodontal procedures have been accomplished. The flap is ready to be returned to place.***



4. ***Postoperative view. One silk suture is used to keep the tissue in place. No surgical pack is necessary.***

cedures must therefore be adopted.

Retention of Tissue Obtained—In using the gingival flap operation one of the primary goals of periodontal therapy, maximum retention of tissue, is achieved. While it is true that gingivectomy eliminates the pocket, the result is often poor in regard to esthetics, patient comfort, food impaction, and psychologic factors.

Additional Advantages—(1) By using gingival flap surgery it is often possible to obtain clinical reattachment at a higher level than previously existed. (2) In a shallow pocket other surgical procedures may not be necessary. (3) In deep pockets gingivectomy, while still necessary, can be done at a higher level, thus gaining maximum tissue retention.

Indications for Surgery—There are certain cases where gingival flap surgery should be used, even where gingivectomy eventually will be done. These include the following:

1. In teeth which past experience has shown to be notably sensitive post-operatively.

2. Maxillary anterior teeth where the cervical areas are visible in normal movements of the lips.

3. Isolated deep pockets where gingivectomy would produce an unsightly break in the continuity of the gingival margin.

Delayed Surgery Advised—The gingival flap should not be used until all conservative procedures are complete, and reexamination shows the persistence of pathologic pockets. Beube[2] states, "Delay of applying surgery after the conservative treatment has been prescribed is not disadvantageous, because it prepares the periodontal tissue for a more favorable postoperative response. The wound edges show much less tendency to form excessive granulomatous tissue than in those cases where surgery is done without first applying curettage procedures."

Surgical Technique

Figure 1—The surgical area is shown. A deep pocket persists between the maxillary right central and lateral incisor. Conservative procedures have failed to eliminate the pocket or to materially reduce its depth.

Figure 2—Shows the flap retracted, exposing the operative field. Note that only one vertical incision has been made, bisecting the papilla distal to the lateral incisor. By making this vertical incision bisect the papilla, an esthetic result is assured. Too often the vertical incision is made at the center of the tooth labially, producing a break in the normal continuity of the healed gingiva. Note that granulation tissue is present at the base of the pocket.

Figure 3—Shows the area at the completion of periodontal procedures which include:

1. Removal of the remaining deposits.

2. Curettage of the cementum.

3. Removal of the granulation tissue at the base of the pocket.

4. Removal of the epithelium lining the pocket.

Figure 4—The tissue is returned to place with one silk suture. No surgical pack is used. The patient is advised to protect this area from food and to rinse with a saline mouthwash after forty-eight hours.

Summary and Conclusions

1. Periodontal pockets must be eliminated, but in themselves pockets represent symptoms of disease. The etiologic factors must be eliminated if treatment is to be successful.

2. Gingival flap surgery is desirable in cases where gingivectomy must be kept at a minimum due to a consideration of tooth sensitivity or esthetics.

3. Gingival flap surgery provides better access for accomplishing complete subgingival curettage.

4. Gingival flap surgery should be performed only after conservative treatment has been completed.

5. The technique of gingival flap surgery has been thoroughly illustrated.

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[2]Beube, Frank E.: Periodontology, New York, The Macmillan Co., 1953, p. 519.

Importance of the CHEWING HEIGHT *in Prosthesis*

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DIGEST

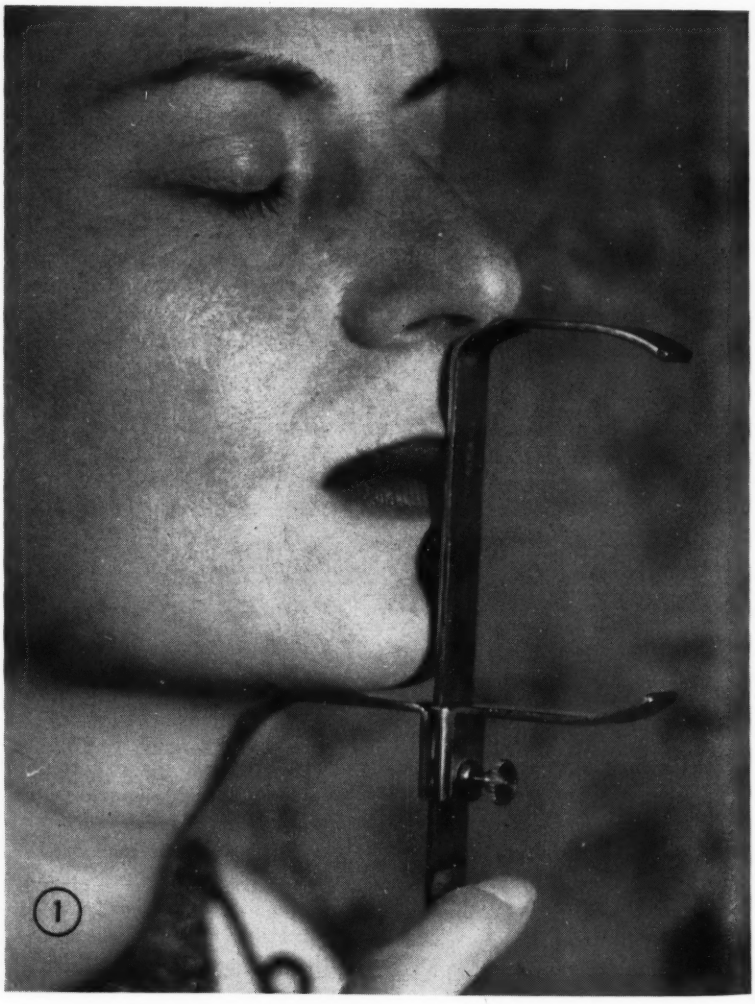
The author of this article distinguishes between a normal chewing height, referred to as physiologic, and a pathologic chewing height as one that is either too high or too low. A simple method evolved by the author for determining the correct chewing height is described.

Lower Chewing Height Advised

For patients who have been edentulous for a long time and who have undergone transformative and organic changes in temporomandibular articulation a choice of a chewing height [vertical dimension] a little lower than the normal one is advised as being more suitable for satisfactory function of the prosthesis. If this measure is not followed the articulation is forced to adapt itself in a way, which because of the generally advanced age of these patients, is neither easy nor simple. This incapacity to adapt to the new conditions will result in a diminished functioning of the prosthesis.

Each Height Individual—In order to establish a chewing height which is to be lower than the normal one, it is obvious that the chewing height must be individualized; it is therefore advisable to utilize any knowledge or method which presents itself on this subject (Figs. 1 and 2).

Original Chewing Height Created—In the case of persons who have lost their teeth recently and where a record of the vertical dimension is not available, it is necessary to resort to other measurements and information. In these cases the chewing height created should approximate the original as nearly as possible.



Method Used in Determining Chewing Height

Basic Method—The so-called classical method (for instance, the comparison of the lower half of the face with the upper half) is based on classical rules and anthropometric measurements, whereas the author's method is based on a biologic premise in addition to clinical observations which demonstrate the existence of dimensional proportions between the various extremities of the human body which are in turn dependent upon the physiologic and pathologic state of the various glands of internal secretion. Among these the pituitary gland is especially important.

System Reported—The skepticism of some and the encouragement of others have induced the author to report a method of determination of the chewing height, which although not claiming to solve the problem, has provided the statistical figure of 70-80 per cent documented positive results. The system therefore would seem to merit further investigation of its practical aspects.

Negative Results Classified—The remaining 20-30 per cent results which were not positive are to be catalogued and subdivided after the author's classification which follows.

Classification Described—The author distinguishes between a normal chewing height, referred to as physiologic, and a pathologic chewing height, which being either too high or too low, will not correspond to the proportions of other parts of the organism or any of its elements.

Factors in Procedure

The following considerations must be observed:

1. The measurements should be taken by compressing the soft parts of the hand and face and using a suitable instrument; otherwise the results will not be correct (Figs. 1 and 2).

2. At present the method is only applied for the determination of the chewing height in the construction of complete dentures and to control the chewing height of the already constructed dentures.

3. Further investigation of the method will include testing by all the means at disposal in respect to functional and esthetic requirements.

Conclusion

It is suggested that operators interested in this field take the measurements discussed, thereby availing themselves of the procedure described. It is believed that if accepted by a majority of operators this method will become a valuable contribution in the solution of the problem of the full denture prosthesis.

Via Vallazze 102.

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The Use of TETRACYN® *in Dental Infections: a Preliminary Report of 20 Cases*

HOWARD B. ADILMAN, D.D.S., M.S.D., and JOSEPH C. CALANDRA, Ph.D., M.D., Chicago

DIGEST

The use of antibiotics in the treatment of oral infections has been shown to be an effective and rational form of therapy. It must be remembered that antibiotics are not a substitute for intelligent, carefully planned treatment or surgical intervention; their combined use, however, along with proper and adequate dental procedures has reduced morbidity and the number of complications.

Factors Involved in Use

Antibiotics must be used in quantities sufficient to maintain therapeutic blood levels for several days after the temperature has returned to normal. Inadequate antibiotic therapy is perhaps more unsatisfactory than none.[1]

The choice of an antibiotic depends on well-established principles and experience. One of the newer compounds with antibiotic activity which has been successfully screened in laboratory and clinical investigations is Tetracyn® (tetracycline).*

Description of Drug

Tetracyn is a new crystalline antibiotic with a broad spectrum of antimicrobial activity.[2] The new drug is an amphoteric substance, forming salts with acids and bases, and is almost identical in structure with its two analogs.

Toleration High — Tetracycline maintains a high level of concentration in body fluids and has a low order of toxicity.[3,4]

Absorption Improved — Active against the common gram-positive and gram-negative organisms, including those found in the oral cavity, Tetracyn is readily absorbed from the gastrointestinal tract and appears in the saliva in active concentrations.[5]

Side Effects Decreased—In addition, a decrease in the incidence of gastrointestinal side effects, has been reported.[6] These latter properties of Tetracyn are important to the dentist who may not have the facilities to handle allergic reactions to a drug, or to treat patients with severe gastrointestinal disturbances.

Case Histories

In this preliminary study a series of 20 patients selected at random were given 500 milligrams as a starting dose and 250 milligrams every six hours for two or three days as an adjunct to surgical or dental treatment.

Case One—Two supernumerary teeth were removed from the palatal and midline area in a child, age six. Tetracyn was given prophylactically. Postoperative temperature remained normal. There was no nausea, diarrhea, or any other gastrointestinal disturbance.

Case Two—In a patient of fifty a chronic fistulous tract was present on the labial surface in the mucobuccal fold over the apex of the cuspid. The tract had been opened and cleaned several times in the last 12 months. There was still a persistent opening and loss of mucopurulent fluid, but no elevation of temperature. A palatal flap was laid and a large fibrous solid mass removed. The entire area was curetted and the patient was given Tetracyn for 48 hours. There were no postoperative complications except that of palatal swelling which persisted for 24 hours. No adverse reactions to the medication were reported by the patient.

Case Three—This patient, age thirty-five, had an infection involving three upper anterior teeth, all teeth having previously been filled within four hours with gutta-percha. There was no elevation in temperature at the time of surgery which consisted of the removal of the apical granulomas and infection with concomitant reduction of parts of the roots. The patient was seen 24 hours later and was in no distress. There were no adverse systemic reactions due to the medication.

Case Four—A 43-year-old patient presented with a subcutaneous infection involving a lower bicuspid tooth.

*The trademark of Chas. Pfizer and Co., Inc. for tetracycline is Tetracyn, which was supplied by Dr. T. A. Garrett, J. B. Roerig and Co., Chicago.

[1]Mallet, S. P.: Antibiotics—Dentistry, Harvard Dent. Alum. Bull. **13**:11.

[2]Boothe, J. H.; Morton, I. J.; Petsi, J. P.; Wilkinson, R. G.; and Williams, J. H.: Tetracycline, J. Am. Chem. Co. **75**:4621, 1953.

[3]Lawler, F. G.; Cella, P. J.; and Dvera, J.: Tetracycline in Broad-Spectrum Treatment of Infants and Children, Clin. Med. **61**:207 (March) 1954.

[4]Finland, M.; Purcell, E. M.; Wright, S. S.; and Del Love, B., Jr.: Clinical and Laboratory Observations of a New Antibiotic, Tetracycline, JAMA **154**:561 (Feb. 13) 1954.

[5]Maynard, A. de L.; Andiola, J. C.; and Prigot, A.: Tetracycline Hydrochloride Studies on Absorption, Diffusion, Excretion, and Clinical Trial, Antibiotics Annual, New York, Medical Encyclopedia, Inc., 1953-1954, p. 102.

[6]Flippin, H. F.: The Tetracyclines, Phil. Med. **49**:733 (Jan. 30) 1954.

TABLE I

Case	App. Age	Disease	Treatment: Surgery and Medication	Treatment: Tetracyn (500 mg. Starting Dose) Every 6 Hrs.	Temperature: Init.	Temperature: After 24 hrs.	Temperature: After 48 hrs.	Side Reactions	Results
1	6	Supernum. Teeth	Extractions	250 mg.	Normal	Normal	Normal	None	Very good
2	50	Chronic Fistulous Tract	Surgical Curettage	250 mg.	Normal	Normal	Normal	None	Very good
3	35	Alveolar Abscess	Mult. Apicoectomy	250 mg.	Normal	Normal	Normal	None	Very good
4	43	Space Abscess	Extraction, Incision, Drainage	250 mg.	99.4	98.5	Normal	None	Good
5	48	Postoperative Complications	Saline Mouth Wash (Hot)	250 mg.	99.8	Normal	Normal	None	Good
6	35	Space Abscess	Extraction	250 mg.	99.8	99.4	Normal	None	Very good
7	12	Impacted Permanent Teeth	Surg. Flaps, Ostectomy, Extrac.	250 mg.	Normal	Normal	Normal	None	Very good
8	29	Infected Operculum	Irrigation and Dressing	250 mg.	99.6	Normal	Normal	None	Very good
9	46	Postoperative Complications	Medication	250 mg.	Normal	Normal	Normal	None	Very good
10	52	Postextraction Complications	Sequestrectomy	250 mg.	Normal	Normal	Normal	None	Very good
11	35	Impacted 3rd Molar	Extraction	250 mg.	Normal	Normal	Normal	Slight Discomfort	Good
12	33	Fracture of Maxilla	Extraction & Debridement	250 mg.	Normal	Normal	Normal	Slight Nausea	Very good
13	39	Buccal Space Abscess	Extraction, Incision, Drainage	250 mg.	100	99.4	Normal	None	Very good
14	37	Caries and Periodontitis	Multiple Extraction	250 mg.	Normal	Normal	Normal	None	Very good
15	22	Buccal Space Abscess	Extraction, Incision, Drainage	250 mg.	100.6	Normal	Normal	None	Very good
16	41	Frac. Zygoma	Medication	250 mg.	Normal	Normal	Normal	None	Very good
17	31	Buccal Space Abscess	Extraction, Incision, Drainage Penicillin	250 mg.	98.8	Normal	Normal	None	Very good
18	49	Bucc. Space Absc.	Extraction	250 mg.	100	Normal	Normal	None	Very good
19	62	Apical Abscess	Medication	250 mg.	99.4	Normal	Normal	None	Very good
20	17	Apical Abscess	Extraction, Incision, Drainage	250 mg.	99.4	99	Normal	None	Very good

The swelling involved the vestibular space and the subcutaneous space between the superficial and deep fascias in the mandibular area at the corner of the mouth. The temperature was 99.4°. The tooth was extracted, the vestibular space incised and drained, and a hemostat introduced into the subcutaneous space. Five hundred milligrams of Tetracyn were given initially and a dose of 250 milligrams every six hours thereafter. The patient was seen after 24 hours and showed marked reduction of swelling; temperature was 98.5°. He had no systemic effects or adverse complaints.

Case Five—A patient of 48 experienced extreme swelling and discomfort after an apicoectomy performed the previous day. The temperature was 99.8°. The patient was placed on Tetracyn tablets and saline mouthwashes. When seen the next day, 48 hours postoperative and 24 hours after Tetracyn was given, his temperature was normal. The swelling was reduced and the patient was comfortable. Slight gastric disturbance was evident but it was not severe.

Case Six—A 35-year-old patient had an infection involving the vestibular and possibly the subcutaneous space. The temperature was 99.8°. The tooth was extracted and the area incised and drained. The temperature after 24 hours of treatment with Tetracyn was 99.4°, the swelling was reduced, and the patient was at ease. The temperature had returned to normal in 48 hours.

Case Seven—In the case of a child, age 12, there were several supernumerary teeth preventing the permanent bicuspids from erupting. Three separate flaps were laid and the supernumerary teeth and bone removed in order to facilitate the eruption of the permanent teeth. The temperature was normal at the time of surgery. There were no postoperative complications when the patient was seen after 24 hours. The temperature was normal 48 hours postoperatively and no side reactions were reported.

Case Eight— In a patient of 29 who had a temperature of 99.6° and complained of pain in the lower molar area, examination revealed an infected operculum over a partly erupted third molar. Debris was removed from below the operculum and a gauze dressing was placed in the void between the tooth and tissue. Tetracyn was given in a dose of 250 milligrams every six hours. The patient returned 24 hours later without any pain or swelling; the temperature had returned to normal.

Case Nine—A patient, age 46, was first seen 24 hours after extraction of a tooth. Postoperative complications included pain, swelling, and partial trismus. No sign of symptoms of alveolar osteitis were present. The patient received Tetracyn and was seen 24 hours later. At that time, 48 hours postoperatively, the patient's state of mind had improved and although the original symptoms were still present, they were not as severe. Seventy-two hours later and after a total dose of 3 grams of the drug, the patient had no complaints, minimal swelling was present, and the temperature was normal.

Case Ten—A 52-year-old patient returned to the clinic on repeated occasions due to persistent suppuration and non-healing of an extraction wound in the lower third molar area. An impacted tooth had previously been surgically removed. A sequestrectomy was performed, and a piece of bone removed. The patient's temperature was not elevated at the time of the operation or 24 hours later. There were no complications; 72 hours postoperatively the area was rapidly healing and closing normally. The patient complained of no systemic reaction or alterations in bowel habits.

Case Eleven—In a patient, age 35, an impacted lower third molar had been removed the previous day. The patient had pain for 24 hours and was unable to sleep. No complications were noted intraorally. Extraorally, a slight asymmetry of the face was present. Tetracyn was given to the patient and he returned the following day, with only slight discomfort.

Case Twelve—The patient in this case, age 33, had been in an automobile accident one week previously. He complained of pain in the upper anterior teeth for four days. Extreme tenderness and slight swelling were apparent. X-ray examination revealed a comminuted fracture of the maxilla limited to the anterior alveolar area. There appeared to be a fractured central incisor. The teeth were extracted and the area debrided. The patient was given the drug and 24 hours later showed a normally healing area with no swelling. The temperature was normal. The patient complained of slight nausea and stomach disturbances that lasted for 24 hours.

Case Thirteen—A patient, age 39, with a temperature of 100° had an infection in the buccal area. The eye was partly closed. The swelling had become progressively greater in the last 48 hours. The infected tooth was extracted and an extraoral incision and drainage accomplished at the inferior border of the mandible. The patient was maintained on Tetracyn during the next three days. Postoperative recovery was uneventful and at the end of three days there was little swelling and minimal drainage. The temperature had returned to normal reading within 48 hours.

Case Fourteen—A woman of 37 wished to have several teeth removed at one time. Medical history was negative and multiple extractions were done. The patient was given Tetracyn. Twenty-four hours later a normal healing ridge was present. There was no pain due to surgery or ill effects from the medication.

Case Fifteen—A patient, age 22, presented with a swelling of the buccal area and complete closure of the eye. The temperature was 100°. Extraction, with extraoral incision and drainage was done and the antibiotic was administered. Forty-eight hours postoperatively the patient showed almost complete recovery, minimal swelling and normal temperature.

Case Sixteen—In this case a patient of 41 had a simple fracture of the right zygoma with little ecchymosis. There was no displacement or immediate discomfort nor elevation in temperature. The patient was given Tetracyn tablets for 48 hours. When seen 48 hours after the accident, there were no external visible signs of fracture, infection, or complications.

Case Seventeen—A 31-year-old patient presented with buccal space infection and swelling of the area. It was decided not to incise and drain, or extract at the initial visit. The patient was given 600,000 units of penicillin intramuscularly and instructed to return. On the second day when the patient returned there was no alleviation of the swelling, pain, or other symptoms. Penicillin was administered again. On the third day the swelling was more pronounced, the patient complained of increased pain and discomfort, and his temperature was 99.8°. An incision and drainage was done, extraction completed, and Tetracyn administered. Although the 24-hour postoperative examination showed minimal complications, there was reduction of pain and swelling, and a return to normal temperature.

Case Eighteen—A patient, age 49, had a vestibular and buccal swelling and a temperature of 100°. The patient was nervous and distraught, therefore only the tooth involved was extracted. Tetracyn was

administered; examination 24 hours later revealed a marked reduction in swelling, normal temperature, and improved outlook by the patient.

Case Nineteen—Six months after the placement of a gingival restoration a 62-year-old patient developed pain in the area. X-ray examination revealed an apical infection in the lower first bicuspid. The tooth was opened and allowed to drain. Next day there were tenderness, swelling of the vestibular area, and a temperature of 99.4°. Tetracyn was then administered for three days. The temperature returned to normal after 24 hours. All clinical signs of infection were gone 48 hours postoperatively and no side reactions were reported.

Case Twenty—A patient of 17 presented with swelling over the upper second bicuspid apex. The area involved was limited to the vestibular space. The bicuspid tooth was extracted. The swelling in the area persisted four days postoperatively. When the patient was seen five days after surgery, the swelling had increased and had markedly displaced the cheek. X-rays were taken, the second molar was extracted, the area incised and drained intraorally, and Tetracyn was administered. Temperature at this time was 99.4°. The next day, 24 hours after the administration of the medication and six days after the initial extraction, the patient's temperature was 99°, the swelling was considerably reduced; there was still some purulent discharge, but he was comfortable and relaxed for the first time in a week. No side reactions were reported.

Summary

Twenty cases are presented in which Tetracyn (tetracycline), a new broad spectrum antibiotic, was administered prophylactically and therapeutically for such cases as extractions, space infections, and postoperative complications. It would appear that the incidence of side effects experienced by patients treated with Tetracyn was low and that the drug was well tolerated by most patients. In each case a dose of 500 milligrams of Tetracyn was given immediately; 250 milligrams were then given every six hours for two to three days. In all patients the temperature returned to normal within 48 hours and healing occurred without complications.

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Anatomy of Facial Palsy

Bell's Palsy

The commonest cause of facial weakness in an otherwise healthy adult is Bell's palsy. This eponym was assigned to the disorder well over a century ago; yet the cause is still obscure.

Usually the patient feels a vague ache behind the ear, which is accompanied or followed by a facial weakness that often rapidly becomes more severe; previous exposure to draught is common.

If, in addition to the facial palsy, there is some loss of taste on one side of the tongue, the diagnosis is further confirmed. This clinical picture portrays only the site of the lesion; namely, between the geniculate ganglion, through which taste fibres leave the nerve-trunk, and the origin of the chorda tympani, at which they join it.

Taste is not always involved, however, and it seems that in Bell's palsy the nerve may be attacked at different levels, at any rate between the geniculate ganglion and the styolmastoid foramen.

Analysis of Lesions

It is suggested that lesions of the facial nerve can be defined by carefully analysing the type of palsy and its accompanying signs. In addition to the well-known supranuclear lesion, with preservation of emotional and paralysis of voluntary movement and relative escape of the forehead, seven levels are listed at which lesions may be recognized.

At the nucleus, though all movement is abolished, reflex "tearing" and taste are unaffected, since fibres for these join the nerve in the midbrain and at the geniculate ganglion respectively.

Extracerebrally, but above the geniculate ganglion, tearing is lost but taste preserved.

At the ganglion taste is also lost.

Below this, tearing is again unaffected since fibres for this pass via the ganglion to the greater superficial petrosal nerve.

Further down, the nerve to stapedius leaves the facial trunk, and lesions below this level no longer cause hypercusis to loud sounds.

The chorda tympani segregates taste fibres and lesions after this no longer cause loss of taste.

Just at the stylomastoid foramen a motor branch passes to the digastric muscle, and below this level the slight deviation of the chin caused by paralysis of the digastric is absent.

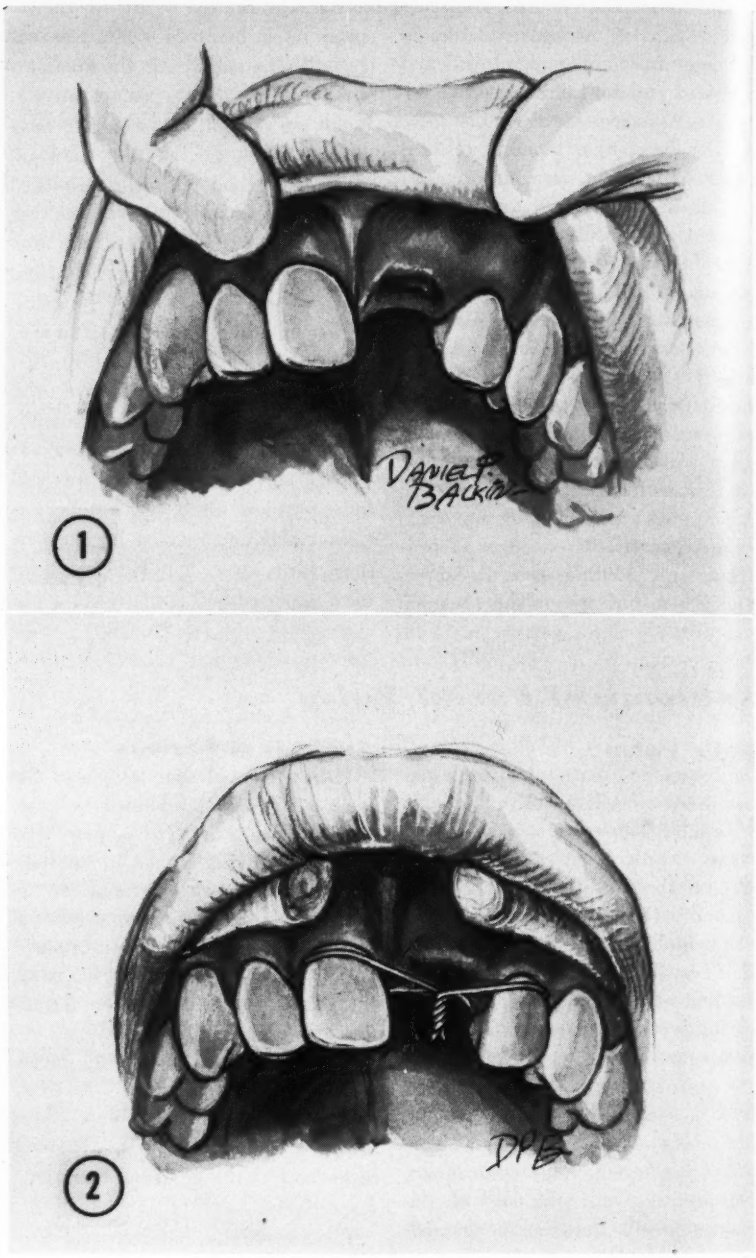
Important Distinctions Possible

Application of these signs to cases of Bell's palsy tends to confirm that the site of the lesion varies. In practice, however, the tests described often give equivocal results. The important distinctions are of upper from lower motor-neurone lesions, and of Bell's palsy from other types of lower motor-neurone lesion. Fortunately, both these distinctions can usually be made on the history and clinical findings.

Adapted from *Lancet* No. **6806**:301 (Feb. 6) 1954.

Procedure for Immediate TEMPORARY BRIDGE

LEON HERSCHFUS, D.D.S.,
Detroit



1. *After extraction.*

2. *Copper wire around each tooth, twisted in edentulous space.*

DIGEST

It is frequently necessary to provide the patient with an immediate temporary bridge after extracting one or two anterior teeth. This article describes a simple inexpensive method in which only self-curing acrylic and copper ligature wire are used.

Procedure

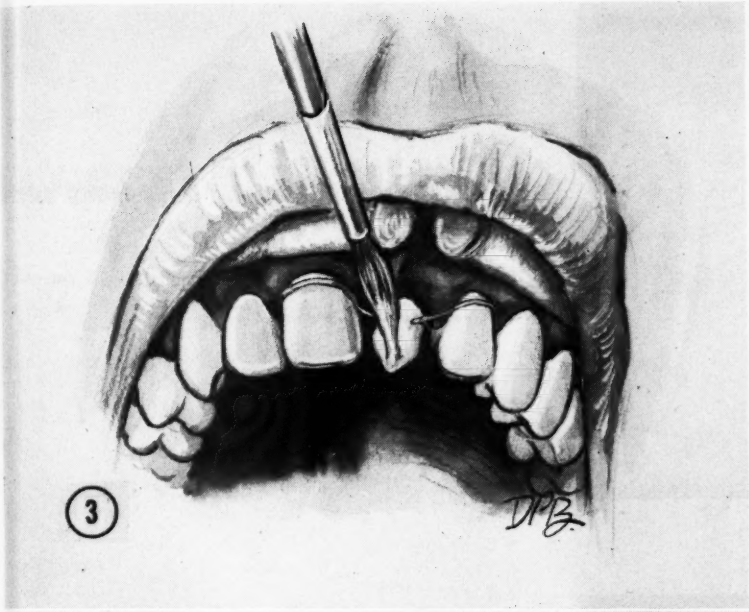
In this case the upper left central incisor is extracted. Immediately after the extraction the socket is packed with terramycin hemostatic powder (Fig. 1). The following steps are then taken:

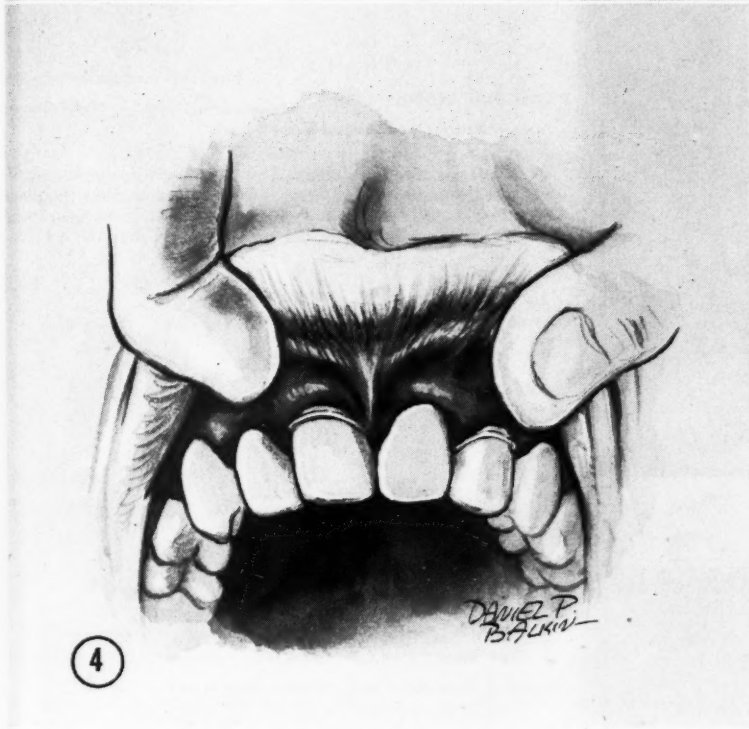
1. Ligature wire (.020 diameter copper wire) is pushed through the interproximal space of the right lateral and right central incisors; brought through the lingual side over the labial side of the left lateral incisor and through the interproximal space of the left lateral incisor and cuspid.

2. The end of the wire is brought through the transverse part of the wire; next the right end piece is brought through after first passing over the labial surface of the right central incisor; both ends are then twisted together in a tail-like shape in the center of the space (Fig. 2).

3. In twisting the two ends together, the loops around the adjacent teeth will tighten and thus be prevented from slipping. The twisted tail part is clipped at a level to leave enough clearance when the teeth are in occlusion.

4. Self-curing acrylic of the proper shade is painted around the tail part of the wire and in the space between





3. ***Beginning of plastic tooth. Acrylic added in layers.***

4. ***Plastic tooth, finished and polished.***

the wire and gum of the extracted tooth in order to give maximum retention. The author used Kadon acrylic (Fig. 3). Then a second layer of extremely soft acrylic is added, and with a Wesco spatula Number 2 dipped in the dry powder the resin is guided into the desired position.

5. Layer after layer is added in small quantities with maximal free monomer to make each adhere better to the former layer. While the resin is still rubbery, proper contour is given to each layer until the tooth takes on proper shape. With each addition the bite is checked.

Brush-on Technique Used—For the last few layers the brush-on technique is preferred. This facilitates any changes in the shade which may be desired for esthetic reasons. The material will also be denser with no air trapped in the outer layer. In this manner the restoration is built up to proper contour without excess material, making the finishing easier to achieve.

Procedure Completed—When the material has set, usually in about twenty minutes, the tooth is trimmed, deficiencies corrected, and the tooth is polished (Fig. 4).

Time Conserved—The entire procedure, after extraction, takes fifteen to twenty minutes to complete, not including the time allowed for the plastic to become hard.

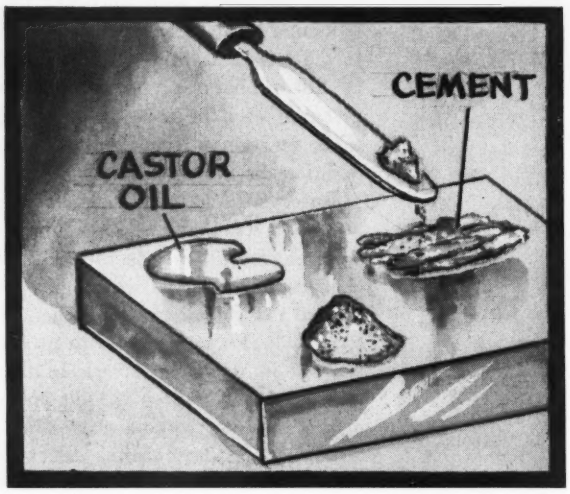
Conclusion

The autopolymerizing resins are particularly well suited for this purpose because of their quick curing and esthetic properties. The wire gives the necessary retention and the bridge can be worn for weeks if necessary.

1201 *Cadillac Tower.*

CORRECTION

THROUGH an error, lines five and six in column one in Doctor J. Raymond Fritz' article in the November issue, CARBON DIOXIDE ANESTHESIA OF THE DENTIN IN CAVITY PREPARATION—PART TWO, were printed incorrectly. Properly, these lines should read: "cools to between 14° Fahrenheit to 28.4° Fahrenheit, forming a coating of white frost." The cover of the November issue shows the frozen bur with two arrows pointing to 14° Fahrenheit and 28.4° Fahrenheit.



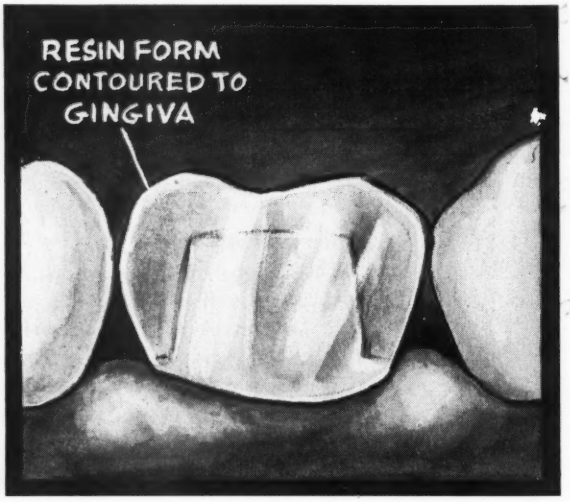
1

Clinical and Laborato

Manipulation of a Cement Base

Robert L. Jacobson, D.D.S., Staten Island, New York

1. Place a drop of castor oil on the slab when preparing to make a mixture of zinc phosphate cement for a base. Touch the instrument to the castor oil. This will prevent the cement sticking to the instrument.

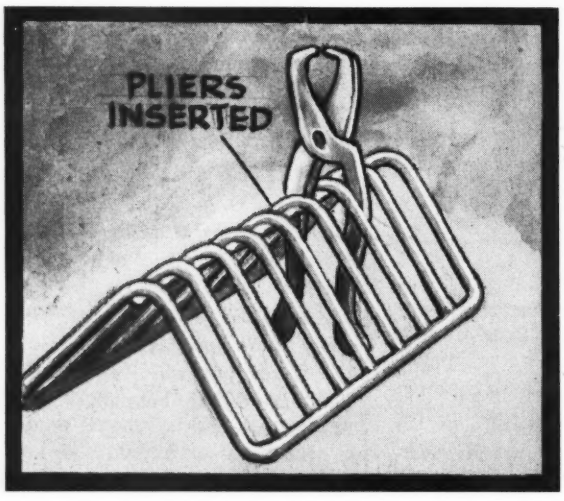


2

Cast Full Crowns

Sanford Kent, D.D.S., Rochester, New York

2. Contour a resin crown form. Fill it with self-processing acrylic and take an impression of the preparation. Remove from the tooth. After the acrylic has set, make the necessary adjustments. Invest the crown form. The resin and the acrylic are burned out. Cast in gold.



3

A Plier Rack

George V. Newman, D.D.S., Newark, New Jersey

3. An ordinary aluminum cake rack is bent to form a rack that will hold pliers.

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For every practical clinical or laboratory suggestion that is usable, DENTAL DIGEST will pay $10.00 on publication.

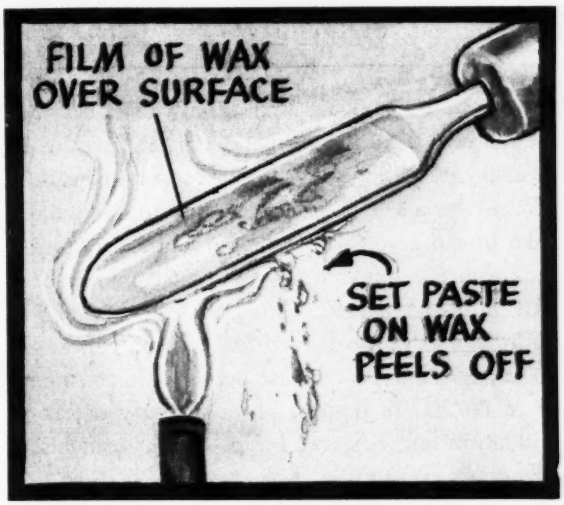
You do not have to write an article. Furnish us with rough drawings or sketches, from which we will make suitable illustrations; write a brief description of the

SUGGESTIONS . . .

Cleaning Zinc Oxide Paste from a Spatula

L. E. Marsh, D.M.D., Tacoma, Washington

4. Warm a metal spatula and draw it over a piece of base-plate wax. Let cool. After the zinc oxide-eugenol mix has been made, allow the cement to set, then warm the spatula. The paste will be easily removed from the instrument.

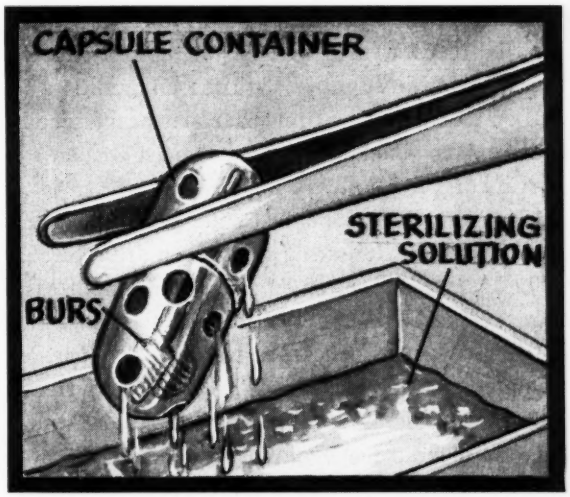


4

Cold Sterilization of Burs

Edward Gershkow, D.D.S., Philadelphia

5. With a Number 9 bur make holes into a capsule container. Place burs in the container and sterilize in a cold solution. The sterilizing solution will enter the capsule and the burs will be prevented from scattering. When removed from the solution they will air dry.

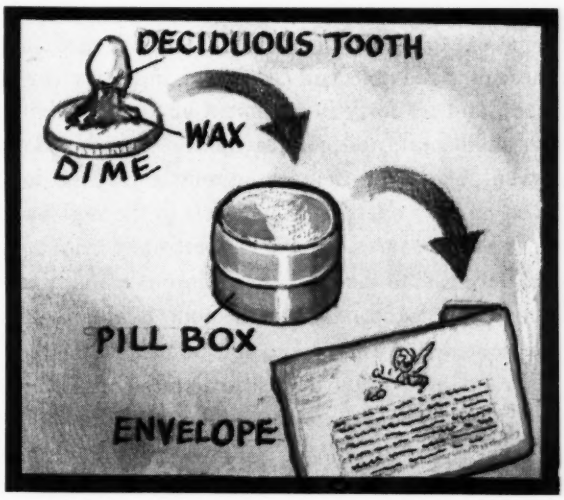


5

A Present for the Child Patient

Harry Cherry, D.D.S., Brooklyn, New York

6. Embed the extracted deciduous tooth in a piece of utility wax and attach it to a dime with a piece of sticky wax. This makes an ideal present for the small child.



6

technique involved; and jot down the advantages of the technique. This shouldn't take ten minutes of your time. Turn to page 558 for a convenient form to use.

Send your ideas to Clinical and Laboratory Suggestions Editor, DENTAL DIGEST, 708 Church Street, Evanston, Illinois.

The EDITOR'S Page

FOR EVERY 100 persons who die of cancer seven of them have cancer that originated in the tissues of the oral cavity. Many of these seven first consulted a dentist for a swelling or a sore spot in the mouth. Some of the seven were sent to dentists by physicians who thought that the mouth lesion was of a local infective nature. On the basis of 200,000 deaths a year in the United States from cancer we can say that 14,000 of these persons die from cancer of the mouth tissues. Through early detection by dentists and referral for prompt treatment by surgery or irradiation it is quite likely that this mortality figure could be reduced significantly. By conservative estimate we may say that dentists have within their power the saving of at least 5,000 lives a year from death from malignant disease.

To be able to serve in this war against cancer, dentists must be supplied with the ammunition of facts on the biologics and mechanisms of malignant disease. A commendable book has been written by an oral surgeon explicitly for dentists.[1]

As an excellent example of the practical value of this book the following quotations are offered:

"Squamous cell carcinoma, or epidermoid carcinoma, as it is sometimes called, is one of the most malignant types of cancer, and as such, is dependent upon an early diagnosis for successful treatment. Since it is the dentist who is frequently the first one to note the beginning of this malignant condition in the oral cavity, the greater amount of the responsibility is upon him to institute treatment that will arrest the condition before it can become cancerous; or if it is already malignant, to refer the patient to a surgeon who will begin immediate treatment. Squamous cell carcinoma rapidly metastasizes, and an early involvement of the submaxillary, submental, and cervical nodes of both sides may be noted even though the tongue may be involved on only one side. Metastasis to the regional lymph nodes causes them to hypertrophy and become hard due to the increase of fibrous connective tissue. A hard and fixed lymph node is almost always considered pathognomonic of cancer. If the membrane lining of the node is penetrated or broken through, the gland becomes adherent to the surrounding tissues. Cancer of the left side of the face may first show evidence by the invasion of the lymph nodes on the right side of the face. This may be accounted for by the anastomoses of the lymphatic chains in and around the area of the neck. The primary lesion may be eliminated and showing no signs of recurrence, but metastases may have progressed further up the lymph chains in which evidence may not be shown until months later. At first, there is a barely discernible enlargement of one or more lymph nodes. As the disease progresses, the metastatic cervical masses, sometimes bilateral, may steadily increase in size up to 10 to 15 centimeters in diameter. A progressively enlarging metastasis eventually perforates the capsule of the node, enabling the disease to infiltrate the soft parts of the neck to involve adjacent structures. Invasion of the cervical nerve roots by cancer produces severe intractable pain, and impairment of function will result from involvement of the hypoglossal nerve (paralysis of one-half of the tongue), vagus nerve (hoarseness). As the disease metastasizes, the entire side of the neck, floor of the mouth, or the mandible may become solidly encased by the tumor, producing bulky, fluctuant, liquefied abscesses. . . .

"Extraction of teeth in the presence of cancer is of interest to the dentist. If teeth are extracted in the presence of undiagnosed cancer, valuable time will be lost in waiting for healing before any attempt is made to diagnose the lesion. This delay may allow a cancer to progress to such an extent that early death is certain. This mistake of extracting teeth in undiagnosed cancer is easily understood because many patients make their own diagnosis and present themselves for extraction. They demand extraction. These patients are displeased if the dentist refuses to extract the teeth to clear up an obscure gingival lesion, but should the tooth be removed and the diagnosis of cancer subsequently be made, these patients often profoundly blame the dentist. Therefore, extraction in undiagnosed cancer or chronic gingival ulceration is dangerous to both dentist and patient."

This book by Bourgoyne deserves the earnest study of every dentist who makes claim to interest in the advancement in human health and the conquest of disease.

[1]Bourgoyne, J. Roy: Oral Cancer, Philadelphia, Lea & Febiger, 1954, pp. 113-117.

Annual Index–1954

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Editorials

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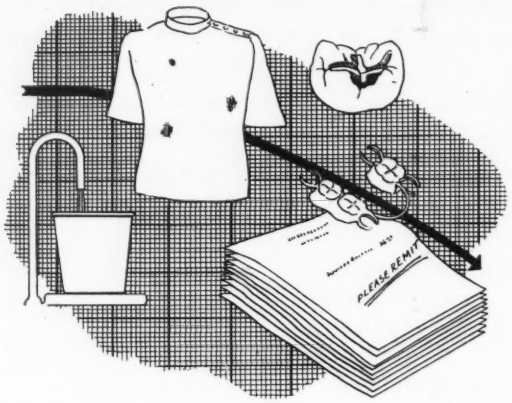
Fluoridation

Medical Subjects

In your ORAL HYGIENE this month



Turnover in Dental Practice

Even the dentist who is blessed with a full appointment book will find this article well worth reading, for a normally careful man, when too hard pressed for time, may unknowingly develop careless habits—the kind of habits which are responsible for much of "The Turnover in Dental Practice."

As Doctor Harold Gluck points out, "You are dealing with a human mind that is the average mind. In order that the patient sees the procedure, it may become necessary to go through what looks like time-consuming rituals, such as the careful washing of hands, the overworking of the sterilizer, or even changing into a fresh coat."

★ ★ ★

Do you make good use of "Your Super Secretary Without Salary"? Mary Hudgins explains how you may call upon your local librarians for information which might take you hours to dig out of books. These well-educated women are trained to sort, sift, and file data so that it is available almost instantly. Even the libraries of smaller communities possess surprisingly complete files on literally thousands of subjects. So, when you need information, why not pick up your phone and call your efficient—and co-operative—"super secretary"?

★ ★ ★

Are you seeing your patients as *they* are or as *you* are? Edith Calmenson warns dentists that, while it's perfectly natural to judge others by ourselves, it is not an accurate method of appraisal. Your patient may not share your mental, emotional, or even financial viewpoint. "Striking a Balance in Patient Relations" is not the easiest thing in the world to do—but it is certainly well worth trying.

★ ★ ★

Doctor A. I. Chertock is, according to his article, about to come up with a world-shaking dental discovery—if his unusual research materials hold out. You will smile at the gentle satire of "The Hotel X. . . . Discovery."

★ ★ ★

Thousands of people will know Doctor John Marsh and his wife, Betty, as well as they know their favorite movie actors. In fact, the Marshes may well *be* favorite screen personalities for they're starring in "Cinerama Holiday," the story of an American couple's trip to Europe. Marcella Hurley has written the interesting story of their exciting adventure.

★ ★ ★

"Get Your Child Patient's Chin Off His Chest," advises Doctor Richard S. Youngs, and explains how you can do it. It's much easier to work on a child when you—and he—are comfortable.

★ ★ ★

Don't miss the regular departments and features which appear in Oral Hygiene every month. From the erudite quiz questions to the frivolous "Laffodontia," dentists will find information and relaxation packed into these special pages.

Medicine and the Biologic Sciences

Miscellaneous

Nutrition and Health

Operative Dentistry

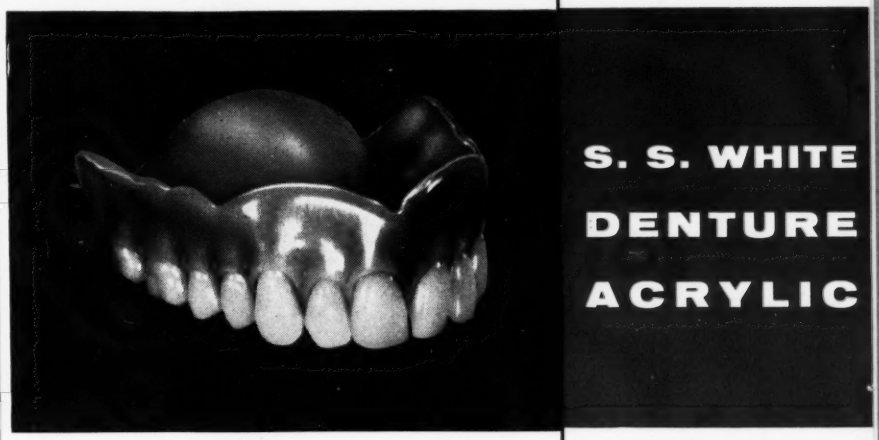
Oral Pathology

Oral Surgery

Periodontics

Roentgenography

LASTING AND LIFE-LIKE



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COLORS: Permanent Pink—Clear. From your dealer.

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HYGIENIC PERM Multi-purpose Cold Cure Acrylic

The Hygienic Dental Manufacturing Co., Akron 8, Ohio, U.S.A.

CLINICAL AND LABORATORY SUGGESTIONS

(*See pages* 552 *and* 553)

Form to be Used by Contributors

To: Clinical and Laboratory Suggestions Editor

DENTAL DIGEST
708 Church Street
Evanston, Illinois

From: _____

_____

Subject: _____

Explanation of Procedure:

Sketch:

Suggestions submitted cannot be acknowledged or returned.

$10 will be paid on publication for each suggestion that is used.

Contra-Angles

How Not to Win Friends

A certain man wrote a book on making friends and influencing people. This man gives courses throughout the country on the subject. He also wrote a book on Lincoln. I too wrote a book on Lincoln. Following the precepts of Mr. Carnegie's teaching, I wrote to tell him how good I thought his book to be. And it was! In reply I received a *form* postcard. This kind of impersonal response did not please me. The inconsistencies that men live by are more significant than the principles they preach about.

I have been told that some of the characters who make a living on TV, radio, and in motion pictures measure their box office appeal by the amount of mail that they receive. I have known people, although I plead that I am not among them, who have written considerate and helpful letters to these performers and in return had no reply—not even a form postcard.

One way that we can deflate some of these pompous people who take themselves too seriously is to ignore them. Watch them and listen to them if we must, but seldom give them the satisfaction of a fan letter. Scant mail in the box for them and they have nothing to use to sandbag a sponsor. Modest acclaim rather than dripping praise may make them more artful in their performances and less rude in their conduct. What the entertainment field needs is less hero worship and fewer swooners to ensure better performances. On TV particularly, the characters should be required to work harder for their money which they now receive in excessive amounts through the indirect generosity and praise of the viewers. I am all for praising any worthy act, but the acclaim should

receive the reciprocal of a courteous response.

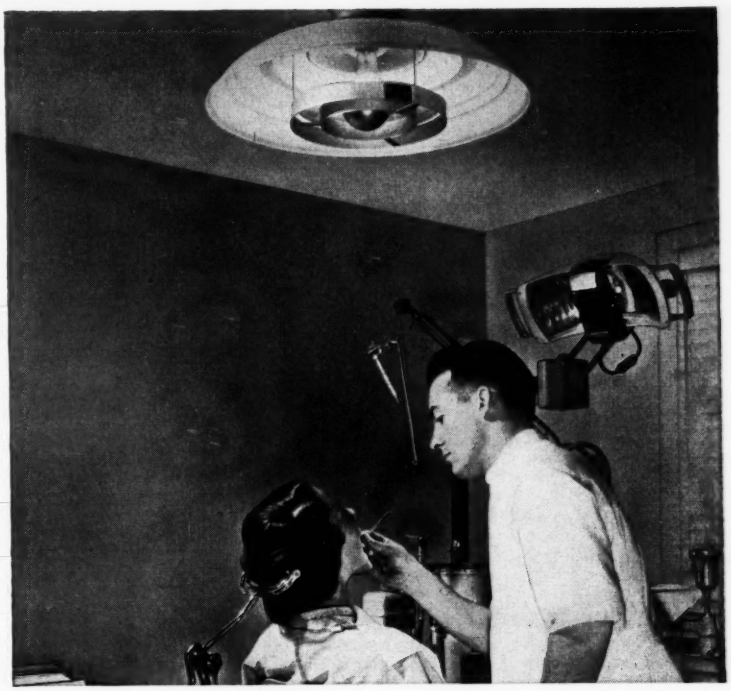
Look at the Labels

On several occasions we have sounded an alarm of warning on the matter of "poison" in our foodstuffs. The esteemed publication, *Consumers' Research Bulletin* has done the same. An article from *Consumers' Research Bulletin* is printed in full and with permission because we believe that dentists are in an important position to educate the public on nutritional and other fundamental health subjects:

"Did you ever take time to make a leisurely trip through a well-stocked supermarket, reading the labels of many attractively packaged and labeled foods to discover just what goes into them? Try it when you have some extra minutes and you will find it an enlightening experience. Take just ordinary soup mix, for example. Here is a chicken noodle soup mix that lists its essential ingredients as: enriched egg noodles, salt, glucose solids, chicken meat, vegetable powders and flakes, chicken fat, hydrogenated vegetable fat, cornstarch, monosodium glutamate, hydrolyzed plant protein, and seasonings. Another that is just called 'noodle soup mixture' declares the following: genuine egg noodles, salt, sugar, monosodium glutamate, vegetable oil and pure chicken fat encased in pure gelatin and glycerin, wheat starch, specially prepared spice extracts, dehydrated onion powder, and parsley flakes. Both these products can be prepared for use, according to directions, in 10 minutes, but they are a far cry from the simple ingredients of chicken broth, noodles, and seasoning called for in a good quality chicken noodle soup as it would be made in the home where good food is prized.

"Wandering down the line of groceries, we inspect packaged desserts. Here is a *custard flavor* mix that boldly admits it contains no eggs, as if absence of eggs were desirable. It does, however, call for the addition of milk to its ingredients, which are listed as: sugar, dextrose, carraghen extract, salt, artificial flavoring, and U.S. certified color. Still another requires no cooking but only the addition of cold milk to the following ingredients: sugar, precooked starch, dextrose, cocoa, salt, artificial vanilla flavoring, emulsifier, calcium carbonate, and sodium phosphate. Further in the dessert line are packaged bases for soft drinks and desserts. On one labeled orange flavor, we find listed: a mixture of dextrose (85 per cent), citric acid, orange flavor, and artificial color; on one labeled imitation grape flavor, the ingredients were listed as: dextrose, citric acid, imitation grape flavor, and U.S. certified color.

"Many of these ingredients of packaged foods sound more like a chemical formula from a laboratory than a tasty dish for one who enjoys good eating. There is, of course, a whole school of thought which predicts that in the course of time we shall largely depend on pills or powders containing all essential elements for adequate nourishment, but a great



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Wherever possible always use Steele's GOL-FAC backings when restoring anterior teeth with Steele's Facings or Trupontics in New Hue shades. The gold labial face of these backings preserves the original New Hue shades – making shade matching easier and insuring best esthetics.

Steele's GOL-FAC backings have the same physical properties and mechanical advantages as the standard Steele's P. G. backings, and are therefore adapted to the same technics. NOTE: In casting to *any* Steele's backing always use a *protective* type of investment (Steel's Super Investment).

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COLUMBUS 6, OHIO

Steele's

many of us remain unconvinced of either the likelihood or desirability of such a future.

"If, however, you pursue your reading of food labels, you can find a number that sound more appetizing. Here is a Welsh rarebit, for example, that lists its ingredients as aged cheddar cheese, dry sherry wine, non-fat milk solids (dried skim milk), flour, water, salt, and spices. There is a lobster a la Newburg prepared from lobster meat, non-fat milk solids, water, sherry wine, flour, peanut oil, butter, eggs, salt, pepper, seasonings, and certified food color. These are all ingredients, except possibly the artificial color, that would be used in the home kitchen of a family that enjoys good food.

"The busy homemaker will not have time to study labels carefully on every trip to the store, but she will find it very educational to take time now and then to examine carefully the fine print on labels and packages. What appears on the labels of foods, drugs, and cosmetics is determined by the Federal Food, Drug, and Cosmetic Act and, in some cases, by local and state regulations. If canned or packaged food is made of two or more ingredients, those ingredients must be listed by their common or usual names, and, as a rule, in the order of their predominance in the food. Observe, for example, a jar of 'chicken noodle dinner.' If it contains mostly noodles, they must be named first in the list of contents. The net weight must also be given, enabling the homemaker who is quick with arithmetic to divide the prices by the number of ounces and calculate just what the food will cost per ounce. The label must also give the name and place of business of manufacturer, packer, or distributor. Containers must not be misleading to convey an exaggerated idea of the amount to be found in the can or box nor must they suggest a greater amount of food than the actual weight would indicate.

"There is one exception to the requirement that foods having more than one ingredient must declare their entire list of ingredients on the label. Where definitions and standards of identity for various foods have been formally adopted, as for jellies, preserves, and mayonnaise, the ingredients used are standardized and expressed in published documents and do not need to be given on the label. Consumers who would like to know just what foods are covered by these standards can undoubtedly obtain the information by writing the Food and Drug Administration, Washington 25, D.C. The Food and Drug Administration is responsible for policing the labeling of foods sold in interstate commerce. Occasionally a food may be prepared locally, and sold locally, in which case it will not come within the jurisdiction of the Federal Food and Drug Administration, but will be subject solely to state laws and regulations.

"Although labels are supposed to be clear and easy to read, a quick survey will often turn up many which are printed in white on cellophane or in black or other dark colored ink on

FOR ALL IMPRESSION NEEDS
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IMPRESSION TRAY COMPOUND (BLACK)
for accurate impressions
with fine marginal definition
Readily workable for making impression trays. Also used for direct impressions of inlay, three quarter crown and jacket crown preparations. In denture forms and sticks. Exceptionally stable and has minimum thermal changes for materials in this classification.

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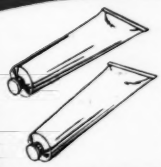
sets quickly . . .
workable at low heat
Preferred by Orthodontists. Used for accurate impressions and for perfecting impressions in trays made from Impression Tray Compound and other materials. In denture forms, sticks and wafers.



IMPRESSION PASTE
full impressions without tissue displacement
No slumping in tray. No back drip in patient's mouth. Quick setting. Ample working time. Impressions keep their form indefinitely. Casts may be poured at laboratories' convenience.

ELASTIC COLLOID
can be withdrawn in one piece
from deep undercuts without distortion
Gives accurate detail of mucous membrane as well as teeth. Ideal for partial impressions and duplicate impressions. Retains its form when kept moist.

SOLUBLE PLASTER
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*Reg. Trade Mark
S. S. White Impression Materials Comply with A.D.A. Specifications Where Applicable
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Is Entirely Different In Every Way

Here are the features:

Its modern design, extra heavy rhodium-platinum resistance winding, special insulation, variable transformer, automatic circuit breaker, and accurate pyrometer and thermocouple enables you to safely raise and control the heat as desired up to 2500° F.

Extra large muffle 1¾" x 2½" x 1⅜" with a much larger area of uniform heat. (See graph below.)

Users report exceptionally long muffle life. Burned-out muffles are exchanged by us at a low set price, and are replaced by you in two minutes.

The floor of the muffle is at convenient eye level.

If you bake porcelain, you should investigate this Baker furnace.

Operates on 110 volts A.C. current, $320 complete.

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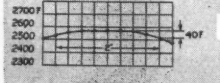

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a dark background in such fine print that it will take a reading glass to decipher just what was used to make the product. In such cases the suspicion naturally arises that there must be some good reason for the manufacturer's desire not to emphasize what he used, for good, wholesome ingredients are themselves an inducement for making a purchase, and would likely be shown in clearly readable type.

"Shopping for food today is a far cry from the time when purchases were made largely of staples and fresh foods that were taken home and prepared in the home kitchen for the family meal. Canned, frozen, and ready-mixed products that require minimum preparation to serve are in wide demand. The ingredients used are often quite different from those which would have been put together by the homemaker in her own kitchen.

"The consumer who wishes to make use of modern technology in the food field and at the same time secure the best for her family will make constant and practical use of the information on the label in choosing what to buy. Remember that the manufacturer or distributor who puts out a product containing the kind of ingredients that would be used by a good home cook deserves support over one whose formula sounds like something out of a chemist's laboratory even if the package carries a mouth-watering picture, is attractively packaged, or sold with a premium inducement.

"Good foods are likely to be more expensive than chemical mixtures that imitate good foods. It is a well-established fact that time-saving, ready prepared, or partially prepared foods cost more (in actual cash outlay) than foods prepared from basic ingredients in the home kitchen. The factor of time-saving is important, but economy, and, above all, quality need to be taken into consideration."

Nutritional injury is the one most common trauma to which people are subject. Few people in the United States are underfed. Many of us are overfed which brings obesity and other conditions of degeneration. Despite an adequate *amount* of food many Americans are malnourished because what they eat contains sufficient calories but insufficient amounts of the essential nutrients. The trace minerals and the vitamins are the energies that keep the metabolic processes in proper and optimum operation. In the microworld of the catalysts, enzymes, hormones, coenzymes are found the forces that keep us in health, or when they are deranged, carry us into disease.—E.J.R.

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(*Continued from page* 538)

ing and demonstrating the characteristic crystals of sodium morrhuate. Tophi may ulcerate and discharge large quantities of white chalky material which gives a positive murexide test. Many of these chronically involved areas show little tendency to heal.

The goal in treating an attack of acute gouty arthritis is to obtain the most prompt symptomatic relief possible. The objective in the further management of the gouty patient is to prevent, so far as possible, the occurrence of additional acute attacks and the development of chronic tophaceous gout if not already present. In spite of therapy, the basic metabolic defect remains unchanged. However, with proper treatment the frequency of acute attacks may be diminished.

Sigler, John W., and Ensign, Dwight C.: Gouty Arthritis, J. Michigan M. Soc. **52**:959-962 (*September*) 1953.

Varicose Veins

It appears that varicose veins form a part of a hereditary syndrome of generalized fascial weakness. The tendency toward the regrowth of varicose veins is inborn. It cannot be eliminated by any known method of treatment.

Some clinicians maintain that not a single permanent cure has been secured by either surgical treatment or injection or by a combination of these methods. Many reports of favorable results are based on an insufficient follow-up. Recurrences have sometimes been observed as long as eight years after apparently successful treatment.

If lymphedema is found to occur in a significant proportion of cases, it will be necessary to conclude that surgical treatment of varicosities is inadvisable.

The venous circulation is abundantly supplied with secondary channels. This safety factor which protects the body in the event of trauma, works

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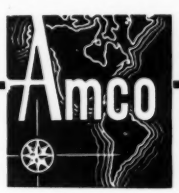

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against any successful treatment of varicose veins. The reaction produced by therapy aimed at their elimination is the same as that produced by injury. Communicating and anastomotic changes begin immediately. Fresh varicosities may appear in the newly developed secondary circulation. Conservative therapy by sclerotherapy remains the treatment of choice. However, since the condition is chronic, it can only be held in check by periodic examination and supplementary injections as needed. No patient should ever be discharged as cured.

Biegeleisen, H. I.: Varicose Veins, A Chronic Disease: Evaluation of 20 *Years of Experience in Treatment, New York J. M.* **53**:963-970 (*April* 15) 1953.

Ultrasonic Therapy

In selected conditions sound waves with vibrations of high frequency, inaudible to the human ear, may be of therapeutic value. The heat produced by sound waves is more penetrating and can be beamed more accurately than other types of heat.

The benefits appear to arise chiefly from the thermal effects of the waves. The therapeutic significance of nonthermal effects, such as increase of membrane permeability, has not yet been sufficiently assessed.

Waves with a frequency of 1,000,000 vibrations per second are the most useful. Lesser frequencies do not give deep penetration of heat. The equipment designed for the application of ultrasonic energy consists of a high frequency generator and an ultrasonic transmitter containing a piezoelectric crystal and electrodes, termed a transducer. In the transducer electrical vibrations are converted into mechanical vibrations, in turn producing sound waves.

The machine used at high dosage can seriously damage many tissues. Therefore, therapy with ultrasonic radiation has definite dangers and limitations.

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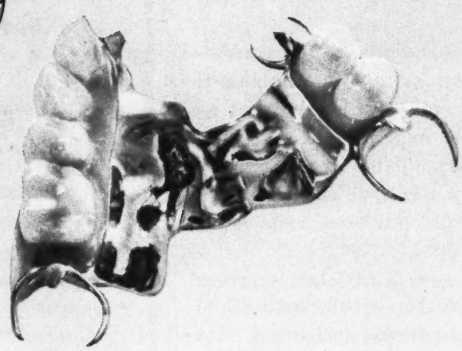

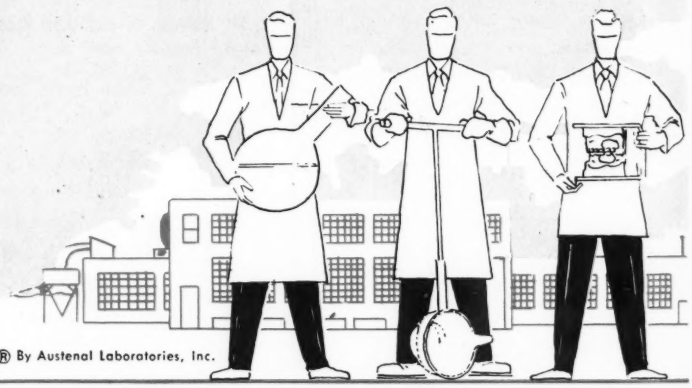

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seal lines and should not be used over growing bones.

The application of ultrasonic waves to the heart or the cervical ganglions may produce abnormal cardiac rhythm. Ultrasonic therapy should not be given to patients with cardiac disease or to pregnant women. Hemorrhage into the eye and detachment of the retina have been reported after this type of treatment.

The procedure is safe if performed in properly selected cases with therapeutic dosage and suitable technique by a trained operator. The dosage is practically self-limited, since patients feel and complain of considerable pain as soon as dangerous levels are approached.

The therapy has been used for many conditions. Benefit is obtained, however, for only a few specific conditions. The chief indications are (1) arthritis or allied rheumatoid conditions, including myositis, acute subdeltoid bursitis and fibrositis, (2) diseases of the peripheral nerves, such as neuritis, especially when involving the sciatic nerve, neuralgia and causalgia, (3) coccygodynia, and (4) pain in phantom limbs. The procedure is of some value in vasospastic peripheral vascular diseases and pyogenic infections of soft parts.

Piersol, George Morris: Therapeutic Application of Ultrasonic Therapy, Postgrad. Med. **14**:24-32 (*July*) 1953.

Something About Lipsticks

A GERMAN woman used a lipstick that she borrowed from another woman. The latter had had it three years and used it only occasionally. After using the lipstick the woman who borrowed it had an inflammation of the lips and itching around the mouth. Then the area became edematous and developed numerous small blisters. With simple moist applications of distilled water the disturbance subsided. Control tests with the same lipstick material brought positive reactions in 2 out of 20 women tested.

The German investigators, Ruther and Friedrich,[1] say that lipsticks are made with eosinic acids and that, if the presence of castor oil can be ruled out, a reaction of hypersensitivity practically never occurs. Therefore a chemical analysis is indicated whenever there is a reaction. Rancidity resulting from long storage may result in irritation. Irritation may result from substances in ointment bases or other coloring matter. Apparently no one has ever seen or reported a case of cancer related in any way to the use of lipsticks. Anyhow the borrowing and sharing of lipsticks just isn't sanitary!

From Editorials, *Postgraduate Medicine* **15**:480 (May) 1954.

[1]Ruther, H., and Friedrich, H. C.: Is Lipstick Harmful? Deutche Med. Wchnschler. **78**: 1370, 1953.

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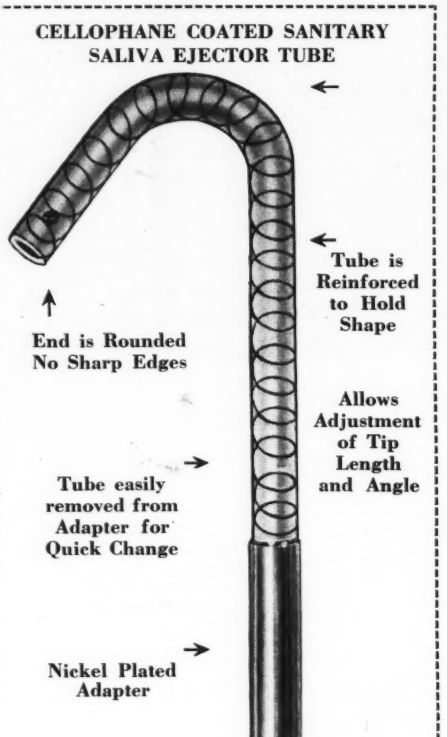

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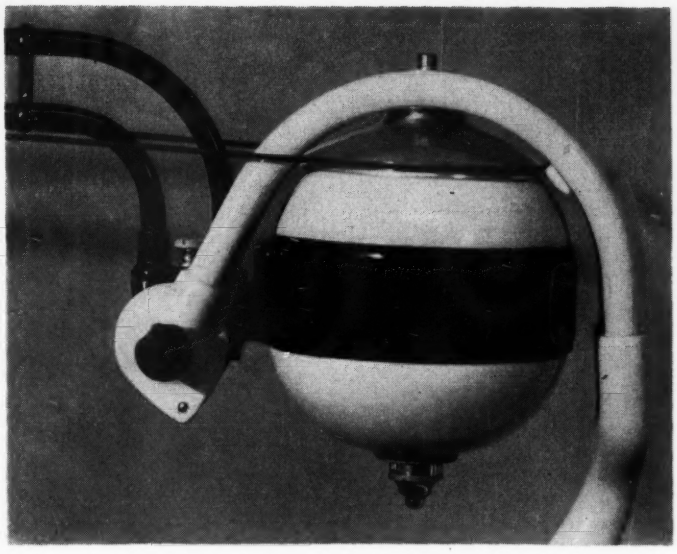

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